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DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF RAILWAYS AND CANALS

FOR THE FISCAL YEAR

FROM JULY 1, 1900, TO JUNE 30, 1901

SUBMITTED IN ACCORDANCE WITH THE PROVISIONS OF THE REVISED STATUTES
OF CANADA, CHAPTER 37, SECTION 28

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY
1902

[No. 20—1902] *Price 60 cents.*

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To His Excellency the Right Honourable the Earl of Minto, G.C.M.G.,
&c., &c., &c., Governor General of Canada, &c., &c., &c.

MAY IT PLEASE YOUR EXCELLENCY,—

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Railways and Canals, of the Dominion of Canada, for the past fiscal year, from July 1, 1900, to June 30, 1901.

All of which is respectfully submitted.

ANDREW G. BLAIR,
Minister of Railways and Canals.

OTTAWA, February 4, 1902.

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REPORT OF THE DEPUTY MINISTER

To the Honourable
ANDREW G. BLAIR,
Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Department of Railways and Canals for the fiscal year ended June 30, 1901.

The annual reports of the engineers, together with general and special reports from superintendents, both of railways and canals, and from other officers in the department, are given in appendices.

In Part II. will be found statements showing the amounts expended during the past fiscal year in construction, repair and maintenance of the several works under the department; also statements showing total expenditure on each canal since its construction, and on each of the government railways; also a statement showing the payments made, year by year, to subsidized railways, with the aggregates of such payments.

RAILWAYS.

The present report deals with those railways of the Dominion directly controlled by the Federal government, and others towards the construction of which subsidies have been granted or authorized.*

In an appendix will be found a special statistical report, embodying returns for the fiscal year ended June 30, 1901, made by Canadian railway companies, as required by statute. This report gives detailed information as to railroad operations in Canada, including the government roads.

The general facts gathered from the compilation will be of interest.

The Act requiring from street railway and tramway companies the same statistics as are demanded from ordinary railway companies was not passed until the 18th of July, 1900: consequently the past fiscal year is the first in which these lines constitute a definite feature of railway statistics.

In view of the rapid developments that are taking place in the use of electricity as applied to traction, not only within town and city limits, but on lines of considerable length extending beyond such limits, it is impossible to say how the question of classification of railways for statistical purposes may require to be handled in the future. In the present report, the statistics of railways the motive power of which is *steam* form one set of statements, and a separate set deals with those lines which are operated by electricity.

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* It should be observed that while the usual reports furnished by the superintending officers, and to be found in the appendices hereto, deal with the fiscal year only, the report of the Chief Engineer of the department covers works of construction up to October 1, 1901.

In the statements presented in the last annual report, however, returns were included which had been received from 13 lines operated by electricity (none of them being street railways proper) but which lines are now removed from the steam line statements and placed in their proper position with the other electric systems.

For purposes of comparison between the two years the financial and traffic figures relating to these 13 electric roads have been deducted in the comparative statements relating to steam railways.*

Steam Railways.

The number of *Steam Railways* in actual operation, including the two government roads, the Intercolonial and the Prince Edward Island Railways, at that date was 163 ; some of these, however, are amalgamated or leased, making the total number of controlling companies 80, not including the government railways. The number of companies absorbed by amalgamation was 36, and the number of leased lines was 34.

At the close of the fiscal year, June 30, 1901, the number of miles of completed railway was 18,294, an increase of 658 miles, besides 2,710 miles of sidings. The number of miles laid with steel rails was 18,184, of which 634 miles was double track. The number of miles in operation was 18,140.

The paid-up capital amounted to $1,042,785,539, an increase of $51,598,893. The gross earnings amounted to $72,898,749, an increase of $2,694,396, and the working expenses aggregated $50,368,726, an increase of $2,987,037 compared with those of the previous year, leaving the net earnings $22,530,023, a decrease of $292,642. The number of passengers carried was 18,385,722, an increase of 1,281,379, and the freight traffic amounted to 36,999,371 tons, an increase of 1,286,149 tons. The total number of miles run by trains was 53,349,394, an increase of 727,870. The accident returns show 16 passengers killed.

Electric Railways (including street railways and tramways).

At the close of the fiscal year ended June 30, 1901, there were 675 miles completed of which 670 miles were laid with steel rails, 158 miles being double track. The paid up capital amounted to $39,076,019, of which the municipal aid amounted to $173,000 (including $100,000 subscription to shares and $40,000 loan). The number of miles in operation was 672. The gross earnings aggregated $5,768,283 and the working expenses $3,435,163, leaving the net earnings $2,333,120. The number of of passengers carried was 120,934,656† and the freight carried amounted to 287,926 tons. The car mileage was 31,750,754 miles ; 3 passengers were killed. Power was supplied in 11 cases by water and in 30 cases by steam. Ontario has 386 miles, Quebec 197, New Brunswick 12, Nova Scotia 10, Manitoba 18, and British Columbia 51 miles. Returns were received from 40 companies.

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*These 13 electric railways are responsible for the figures of the report of 1889-1900 to the following extent :—Miles completed, 187.83 ; capital paid up, $7,081,758 ; gross earnings, $535,917 ; working expenses, $318,110 ; net earnings, $217,807 ; passengers carried, 4,395,832 ; tons freight carried, 282,961 ; train miles, 2,556,347.

†The City street railways carried passengers as follows :—Montreal, 45,833,652 ; Toronto, 37,620,583 ; Ottawa, 7,469,304 ; Quebec, 3,715,675 ; Hamilton, 3,693,677 ; Winnipeg, 3,196,489 ;. Halifax, 2,968.811 ; St. John, 1,710,223, and Vancouver, Victoria and New Westminster (operated by one company and returns amalgamated), 5,336,310.

All Railways, Steam and Electric.

At the close of the fiscal year ended June 30, 1901, the conjoined statistics of steam and electric roads (including street railways), show the following results. The number of companies making returns was 120. There were 18,969 miles of railway completed, 18,812 miles being in operation. The paid up capital amounted to $1,081,861,558. The gross earnings were $78,667,032, and the total working expenses $53,803,889, making the net earnings $24,863,143 ; of passengers 139,320,378, and 37,287,297 tons of freight were carried ; 19 passengers were killed.

The Federal government expenditure on railways prior to and since the date of confederation (July 1, 1867) amounts, on capital account, to 131,559,977 (including $25,000,000 granted to the Canadian Pacific Railway Company for its main line), which, together with $296,872 expended on the Nova Scotia Railway and the European and North American Railway, and transferred to the Consolidated Fund, and for railway subsidies charged against the Consolidated Fund the further sum of $25,737,891*, makes a total expenditure of $157,594,740. In addition, there has been an expenditure since confederation for working expenses $87,130,523, covering the maintenance and operation of the government roads, or a grand total of $244,725,263* ; of which amount the sum of $13,881,460.65 was paid out before confederation.

GOVERNMENT RAILWAYS IN OPERATION.

The railways maintained by the government are : The Intercolonial, the Windsor Branch (maintained only), and the Prince Edward Island Railways.

Details respecting these railways and their operations will be found in the appendices, Part I., containing reports from the chief engineer of the department, the general manager of government railways, and the officials of these roads.

The gross earnings of all the government roads for the past fiscal year, 1900-1901, amounted to $5,213,381.24, and compared with those of the preceding year show an increase of $439,219.37. The gross working expenses amounted to $5,739,051.54, an increase of $1,073,823.48.

The net loss on the operations of the year was $525,670.30.

The Intercolonial gave a loss of $488,186.77 ; the Windsor branch (one-third of total earnings), gave a profit of $30,399.23, and the Prince Edward a loss of $67,882.76.

The above figures include rental, $140,000, paid for the extension of the Intercolonial into Montreal.

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* This includes the annual subsidy of $186,600 to the Atlantic and North-west Railway Company for 20 years from July 1, 1899, which is paid through the Finance Department. It does not include the annual payment of $119,700 as interest at 5 per cent. on the sum of $2,394,000, payable to the province of Quebec for the line from Quebec to Ottawa, which sum has been transferred to the public debt.

INTERCOLONIAL RAILWAY.

On March 1, 1898, the operations of the Intercolonial were extended to Montreal by means of leases obtained from the Grand Trunk and Drummond County Railway Companies, making an addition of 169·81 miles to the operation of the government line; its length being 1,314·67 miles, instead of 1,145.

The leasing agreement with the Grand Trunk Railway Company, dated February 1, 1898, was confirmed by the Act 62-63 Vic., chap. 5 (1899). Its term extends for a period of ninety-nine years from March 1, 1898, the annual rental being fixed at $140,000.

Under authority of the Act 62-63 Vic., chap. 6 (1899), the Drummond County Railway from Chaudière to Ste. Rosalie, together with the branch from St. Leonard to Nicolet has been acquired by the Dominion, conveyance being made by a deed dated November 7, 1899.

The accountant of the railway has dealt with the rental paid under these leases as an addition to the ordinary working expenses and in his comparative statement of averages gives such averages for each year, both with the rental included, and also with rental omitted. The statements of the general manager, however, are based on figures from which these rentals are omitted. This explanation will cover any seeming discrepancy of statement in the matter. The accountant of the department, in his statements (Part II.), includes these rentals, and they are also included in my present report.

CAPITAL ACCOUNT.

During the fiscal year there was an addition of $3,652,313.46 to the capital account expenditure, making the total expenditure chargeable to 'capital' on the whole road as amalgamated under the Acts 54-55 Vic., chap 50 (1891), and 62-63 Vic., chap. 5 and 6, (1899), up to June 30, 1901, $63,975,261.78.*

In the General Manager's present report, herewith, the total cost of the Intercolonial Railway up to June 30, 1900, is set down as $59,987,715.29, whereas in his report of last year, 1899-1900, p. 59, Part I., it was stated to be $58,547,192.18 up to that date, a difference of $1,440,523.11. This difference is explained by the fact that the payment made for the Drummond County Railway $1,459,000 has now been included, and the sum of $18,476.89, representing the amount of certain cheques in payment for lands taken, issued against capital account in previous years, but not used, and, therefore, cancelled during the year 1900-1901, has been deducted.

The General Manager, in his present report, sets down the total cost to June 30, 1901, as $63,640,023.75. The total cost up to that date is set down by the accountant of the department (Part II., p. 32), as $63,975,261.78. This agrees with the public accounts. The difference, $335,233.03, is made up of two items, viz., expenditure on the old Montreal and European Short Line Railway, $333,942.72, and expenditure on the Governor General's car, $1,290.31.

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* See statement of the accountant of the department, Part II, p. 32.

The additions made during the year included : for increased accommodation at Halifax, $31,969, at St. John, $221,932, at Sydney, $96,000, and at Lévis, $90,000 ; for increased sidings, station and other facilities, $353,577 ; for strengthening bridges, $142,678 ; for engine-houses, $132,422 ; for additional rolling stock, $1,563.705 ; for applying air-brakes to freight cars, $25,485, and for steel rails and fastenings, $402,549. Information as to these items will be found in the reports of the General Manager, Chief Engineer and other officers of the railway.

REVENUE ACCOUNT.

The gross earnings of the year amounted to $4,972,235.87, an increase of $420,164.16, and the working expenses to $5,460,422.64 (including $140,000 rent paid for the extension into Montreal), being an increase in comparison with the previous year (when $164,694.47 was paid for such rental), of $1,029,017.95, the excess of expenditure over earnings being $488,186.77, against an excess of earnings over expenditure in the previous year of $120,667.02. Of the expenditure for the past year, the item of 'locomotive power,' is answerable for $1,970,987.70, an increase of $585,917.80.

Comparing the earnings with those of the previous year, the passenger traffic produced $1,607,166.79, or 32·32 per cent of the gross earnings, an increase of $202,696.92 ; the freight traffic amounted to $3,121,006.15, or 62·77 per cent of the gross earnings, an increase of $208,215.63, and the carriage of mail and express freight produced $244,062.93, or 4·91 per cent of the gross earnings, an increase of $9,251.61. The earnings per mile of railway were $3,782.11, an increase of $319.59. The mileage of the railway was the same as in the previous year, namely, 1,314·67 miles.

GENERAL OBSERVATIONS.

The following is a comparison of the traffic of the past fiscal year with that of the previous year :—

The number of passengers carried was 2,025,295, an increase of 233,542 ; of freight, 2,111,310 tons were carried, a decrease of 39,898 tons. The through freight increased 40,359 tons, and the local freight decreased 80,257 tons.

Of flour and meal, 1,292,106 barrels were carried, an increase of 58,030. Of grain, 3,535,364 bushels were carried, an increase of 814,911. Lumber showed an increase of 17,508,890 superficial feet, the total quantity carried being 396,858,890 feet. There was an increase of 3,110 in the number of live stock, of which 95,923 head were carried. Five hundred and six thousand five hundred and ninety tons of coal, a decrease of 96,619 tons, were carried. Of raw sugar, 489 tons were carried, an increase of 383 tons. Of refined sugar, 25,821 tons, a decrease of 3,186 tons, were carried. A total of 9,318 tons of fresh fish, an increase of 371 tons, and a total of 9,768 tons of salt fish, an increase of 3,125 tons, were carried. Of manufactured goods, 476,528 tons were carried, a decrease of 30,496 tons.

Of ocean borne goods, other than deals, to and from Europe, via Halifax, the aggregate was 163,838 tons, an increase of 124,044 tons. Of this, 155,514 tons was local traffic.

The removal of snow and ice entailed an expenditure of $96,855, exceeding by $7,982 the cost of the previous year.

The permanent way and all structures and works are in good order.

The train mileage (or number of miles run by trains) of the year was 6,262,674, an increase of 788,964 miles. The cost per train mile was 87·19 cents, 6·24 cents more than the previous year (in both years the rental of leased lines is included).

The working expenses per mile of railway amounted to $4,153.45,* an increase of $782.72 per mile. The rental of leased lines is included in both years.

The value of stores on hand at the close of the fiscal year, including fuel, rails, and old material, was $1,824,977.04.

The work of fitting quick action air brakes to freight cars has been continued; these brakes have been placed on 1,307 cars during the year, making the total number now so fitted 3,978. In July, 1899, the Dominion Iron Steel Company commenced the construction of extensive iron works at Sydney, Cape Breton. These works are rapidly approaching completion, and blast furnaces were started in the spring of 1901. The establishment of so important an industry has naturally created a demand for more extensive equipment and accommodation on the Intercolonial, which is being met as rapidly as possible.

A number of interesting statistical and comparative tables and other information relating to the railway and the several features of its traffic during the past year and the previous year of its operation, will be found in the appended reports of the Chief Engineer of the department and of the officers of the road.

WINDSOR BRANCH.

This road is 32 miles in length. It extends from Windsor Junction, on the Intercolonial Railway, to Windsor.

This railway is operated by the Dominion Atlantic Railway Company, formerly the Windsor and Annapolis Railway Company. The company pay all charges in connection with the working of the traffic, two-thirds of the gross earnings being allowed them, the government taking the remaining one-third, and assuming all costs of maintenance of the road and works. This arrangement is carried out under an agreement dated December 13, 1892, which extends, for a further term of 21 years, arrangements similar to those made in 1871.

All charges for superintendence and supervision of maintenance of works are borne by the government; the duty of supervision being performed by the chief officers of the Intercolonial Railway.

The gross earnings of the government (one-third of gross receipts) credited to this branch, amounted to $47,261.89, an increase of $89.54. The expenses of maintenance amounted to $16,862.66, an increase of $3,971.10, leaving a profit to the government of $30,399.23.

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*These figures are based on a mileage for both 1899-1900 and 1900-1901 of 1,314·67 miles.

The road has been maintained in good order. Details will be found in the appendices.

PRINCE EDWARD ISLAND RAILWAY.

CAPITAL ACCOUNT.

The total cost of the road and equipment chargeable to Capital Account at the close of the past fiscal year was $4,123,827.21 ; there being an addition during the year of $280,173.93 ; the principal items being an expenditure of $115,663 on the branch to Murray Harbour, and $92,828 for a combined railway and carriage bridge over the River Hillsborough, Charlottetown.

REVENUE ACCOUNT.

The gross earnings amounted to $193,883.48, and the working expenses to $261,766.24 ; the expenditure in excess being $67,882.76.

Compared with the previous year, the gross earnings show an increase of $19,144.75, and the working expenses an increase of $40,834.43. The railway carried 157,793 passengers, an increase of 10,322, producing $78,689.73, an increase of $5,691.31. Of freight, there were carried 73,696 tons, an increase of 11,469 tons, producing $97,425.85, an increase of $13,798.44, while the earnings from mails and sundries amounted to $17,767.90, a decrease of $345.

Compared with the previous year, the working expenses were greater by the sum of $40,834.43.

The train mileage (the number of miles run by trains) was 270,255, an increase of 5,360 miles.

The cost per mile run by trains was 96·88 cents, an increase of 13·48 cents ; and the cost per mile of railway $1,246.50, an increase of $194.45.

The value of stores on hand at the close of the fiscal year was $68,608.51.

The road, with its buildings and rolling stock, has been maintained in a satisfactory condition.

Details of operation will be found in the appendices (Part I.), including the reports of the superintendent and other officers.

SURVEY FOR A RAILWAY TO GIVE ACCESS TO THE YUKON DISTRICT.

During the seasons of 1898, 1899 and 1900, in accordance with parliamentary provisions, surveying parties have been engaged in the work of endeavouring to find a feasible route for a railway, on Canadian territory entirely, to give communication with the Yukon district from a point on an existing Canadian railway, and also from a Canadian port on the Pacific coast, and the approximate cost of such a railway. Reports from the officers in charge of these surveys were printed in the annual reports of 1898-99 and 1899-1900. In the present volume will be found a lengthy report, dated June 1, 1901, from Mr. J. S. O'Dwyer, the engineer in charge, dealing with the explorations made, indicating a feasible route and furnishing estimates of the cost of construction and equipment.

EDMONTON TO TESLIN.

Starting from Edmonton, the present northerly terminus of the Calgary and Edmonton Railway (leased to the Canadian Pacific Railway), a point distant 192 miles north of Calgary on the main line of that company, a feasible route has been found to Lake Teslin. The distance to the head (southerly end) of this lake is 1,240 miles, and the estimated cost of construction at prices for similar work in the eastern section of Canada is set down at $22,908,609 ; to this estimate, the Chief Engineer adds, for the difference between eastern and western prices, 60 per cent, making the estimate for construction $36,653,774 ; the cost of equipment is estimated at $1,866,000, making the total estimate for the construction and equipment of this 1,240 miles, $38,519,774.

BRANCH—SESTOOT TO PORT SIMPSON.

By the construction of a line of railway from a point on this railway—the confluence of the Rivers Sestoot and Skeena—about 432 miles from Lake Teslin, an excellent ocean terminus would be obtained at Port Simpson, 500 miles north from Victoria, the climatic and other advantages of which make it a desirable site for the purpose. This branch runs down the valley of the Skeena ; its length would be 307 miles, and the estimated cost of its construction, at eastern prices, $9,298,400, or, adding 60 per cent for western prices, $14,877,440. The cost of equipment is set down as $488,100, making the total estimated cost of this 307 miles $15,317,540.

ROUTE—PORT SIMPSON TO TESLIN.

For a line of railway from Port Simpson to Lake Teslin, following the route above indicated, a distance of 739 miles, the estimated cost would be, at western prices, $28,050,560, and of rolling stock, $1,060,100, or a total for construction and equipment of $29,110,660.

The following observations as to Port Simpson, made in my report of last year, are here repeated:

'Port Simpson itself, however, which, in common with other possible ports, received in 1879 careful examination, has been pronounced both by naval and engineering experts to be an exceptionally fine, deep harbour, well protected from winds ; easy of access from the sea; free from fogs and ice; never freezing over even during the winter of 1878, which was an extremely severe one ; while the average winter snowfall does not exceed eighteen inches, and this does not remain more than a day or two. The officer of the Hudson's Bay Company records the budding of trees and the blooming of garden flowers on February 10, 1878. These climatic advantages are, of course, due to the Japan current.'

TESLIN TO DAWSON CITY.

From the head (southerly end) of Lake Teslin, by a descending navigation, lake and river, communication, except at certain stages of low water, can be made with Dawson City, a further distance of about 625 miles. By the construction, however, of 150 miles of railway from the head of Lake Teslin, northerly and westerly, communication would be made at White Horse—the present northerly terminus of the White Pass and Yukon Railway—with the existing system of river navigation, now in full operation to Dawson City, a distance of about 450 miles.

The cost of building this 150 miles of railway may be estimated, Mr. O'Dwyer states, in the absence of definite data, at $20,000 a mile (eastern rates), which, allowing an addition of 60 per cent for the difference between eastern and western prices, would bring the cost of building this 150 miles to about $4,800,000, or with equipment, $5,000,000, and would make the total cost of building and equipment for a road from Edmonton to White Horse $43,520,000 and for a road from Port Simpson to the same point, $34,110,000.

RAILWAY SUBSIDIES.

The following pages show, in alphabetical sequence, the position of those companies whose dealings with the government in respect of subsidies are not yet closed. Reports of previous years give information as to companies whose subsidies have been fully earned and paid prior to July 1, 1900.

A tabulated statement of payments will be found in Part II., and a list of subsidy agreements entered into during the fiscal year in Part IV.

The several subsidy Acts passed in each year from 1882 will be found in Part III. No subsidies were authorized in the sessions of 1895, 1896 and 1898.

Information has been brought down to the end of the fiscal year 1900-1901, only, but, in supplement, the following list shows also the additional contracts entered into and the payments made between that date and December 1, 1901.

SUBSIDY CONTRACTS DURING 1900-1901, TO JUNE 30, 1901.

Great Northern Railway Company.—Shawenegan Falls Branch, 6½ miles, contract dated July 4, 1900.

Great Northern Railway Company.—Montcalm to St. Tite, 53½ miles, contract dated July 26, 1900.

Central Ontario Railway Company.—Coe Hill or Rathbun to Bancroft, 21 miles, contract dated August 29, 1900.

Cape Breton Railway Extension.—Port Hawkesbury to St. Peters, 30 miles, contract dated September 15, 1900.

St. Mary's River Railway Company.—From Alberta Railway and Coal Co.'s line to Cardston, Alberta, 30 miles. Contract dated September 10, 1900.

Montreal and Province Line.—Farnham to Frelighsburg and Boundary, 21 miles, contract dated October 31, 1900.

Ottawa and New York Railway Company.—Bridge over the St. Lawrence at Cornwall, $90,000, contract dated October 4, 1900.

Quebec Bridge Company.—Bridge over the St. Lawrence at Chaudière Basin, $1,000,000, contract dated November 12, 1900.

Pontiac Pacific Junction and Ottawa and Gatineau Railway Companies.—Bridge over the River Ottawa between Ottawa and Hull, additional $100,000, supplemental contract dated November 26, 1900.

Chateauguay and Northern Railway Company.—Railway bridge over east and west channels of Rivière des Prairies, contract dated January 19, 1901.

Chateauguay and Northern Railway Company.—From Hochelaga ward, Montreal, to a point on Great Northern Railway, near Joliette with a spur into L'Assomption, contract dated January 19, 1901 ; 42 miles.

Chateauguay and Northern Railway Company.—Railway bridge over Lac Ouareau, contract dated January 19, 1901.

South Shore Railway Company.—Railway bridge over St. Francis river, contract dated June 29, 1901.

Thousand Islands Railway Company.—Extension from present northerly terminus to a point easterly, 2 miles, contract dated March 15, 1901.

ADDITIONAL SUBSIDY AGREEMENTS FROM JUNE 30 TO DECEMBER 1, 1901.

Atlantic and Lake Superior Railway Company.—From Caplin to Paspebiac, 30 miles, contract dated July 25, 1901.

Algoma Central and Hudson Bay Railway Company.—From Sault Ste. Marie, Ontario, towards Michipicoten river and harbour, and towards main line of the Canadian Pacific Railway, 40 miles, contract dated September 28, 1901.

Bruce Mines and Algoma Railway Company.—From a point on Algoma branch of the Canadian Pacific Railway at or near Bruce Lake station, northerly to a point at or near Rock lake, 9 miles, contract dated November 19, 1901.

Kootenay and Arrowhead Railway Company.—From Duncan lake towards Lardo or Arrow lake, B.C., or from Lardo to Arrow lake, 30 miles, contract dated August 26, 1901.

Montreal and Province Line Railway Company.—From Farnham, Quebec, to Frelighsburg, 19 miles, contract dated August 2, 1901.

Red Deer Valley Railway and Coal Company.—From Calgary to a point in township 29, range 23, 4th meridian, 55 miles, contract dated July 30, 1901.

Tilsonburg, Lake Erie and Pacific Railway Company.—From Tilsonburg to Ingersoll or Woodstock, Ontario, 28 miles, contract dated October 15, 1901.

SUBSIDY PAYMENTS DURING THE FISCAL YEAR 1900-1901, TO JUNE 30, 1901.

Great Northern Railway Company	$345,323 11
Canadian Pacific Railway Company (Crow's Nest Pass)	205,524 00
Ottawa and New York Railway Company	90,000 00
Grand Trunk Railway Company (Victoria Jubilee Bridge..	228,371 75
South Shore Railway Company....	88,400 00
Massawippi Valley Railway Company	5,376 00
Inverness and Richmond Railway Company ....•..	132,800 00
Canadian Northern Railway Company	537,600 00
Canadian Pacific Railway Company (Pipestone Branch)	92,800 00
Central Ontario Railway Company	67,200 00
Midland Railway Company	170,264 00
Quebec Bridge Company	74,570 00
St. Mary's River Railway Company	75,000 00
Pontiac Pacific Junction and Ottawa and Gatineau Valley Railway Companies (Interprovincial Bridge)	212,500 00
Atlantic and North Western Railway Company	186,600 00
	$2,512,328 86

ADDITIONAL PAYMENTS FROM JULY 1, 1901, TO DECEMBER 1, 1901.

Quebec Bridge Company	$ 99,760 00
Canadian Northern Railway Company	699,970 00
Atlantic and Lake Superior Railway Company	14,800 00
Montreal and Province Line	32,000 00
York and Carleton Railway Company	18,336 00
Thousand Islands Railway Company	5,440 00
Canadian Pacific Railway Company (Pipestone Branch)	67,200 00
Inverness and Richmond Railway Company	36,800 00
	$974,306 00

GOVERNMENT ACTION AS TO SUBSIDIZED RAILWAYS.

NOTE.—The numbers within brackets after the title of the company refer to the lists of railways subsidized by Parliament, in Part III.

With regard to the several lines of railway subsidized by the Dominion, the following represents the action taken and the progress made, in so far as the Dominion government is concerned; only those lines and companies being mentioned as to which definite steps, other than merely preliminary, have been taken towards securing the subsidy.

The following shows the aggregate of the payments made on subsidy account :—

For the fiscal year	1883-84,	ended on June 30,	1884	$ 208,000	00
do	1884-85	do	1885	403,245	00
do	1885-86	do	1886	2,171,249	00
do	1886-87	do	1887	1,406,533	00
do	1887-88	do	1888	1,027,041	92
do	1888-89	do	1889	846,721	83
do	1889-90	do	1890	1,678,195	72*
do	1890-91	do	1891	1,265,705	87*
do	1891-92	do	1892	1,248,215	93*
do	1892-93	do	1893	811,394	07*
do	1893-94	do	1894	1,229,885	10*
do	1894-95	do	1895	1,310,549	10*
do	1895-96	do	1896	834,745	49*
do	1896-97	do	1897	416,955	30*
do	1897-98	do	1898	1,414,934	78*
do	1898-99	do	1899	3,201,220	05*
do	1899-1900	do	1900	725,720	35*
do	1900-01	do	1901	2,512,328	86*
				$22,712,641	37

To the above there have to be added the following exceptional subsidies :

The Canada Central Railway, paid between 1878-83	1,525,250	00
The Canadian Pacific Railway extension from St. Martin's Junction to Quebec, paid in 1885....	1,500,000	00
Total subsidies paid from 'Consolidated Fund' up to June 30, 1901........................	$25,737,891	37
The main line subsidy to the Canadian Pacific Railway was paid from 'Capital,' amounting to..	25,000,000	00
Total paid as subsidies	$50,737,891	37

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* In these amounts the subsidy of $186,600 a year payable to the Atlantic and North-west Railway Company, for 20 years from July 1, 1889, is included. Payment is made by the Finance Department.

The above does not include the amount, $2,394,000, due to the province of Quebec for the railway between Ottawa and Quebec, which has been transferred to the public debt, and on which interest at 5 per cent is paid, amounting to $119,700 a year. (See note on page 44 of the accountant's statement, Part II.)

Albert Southern Railway Company.

(See Annual Report of 1891-92.)

Atlantic and North-west Railway Company.

(See Annual Report of 1899-90.)

Baie des Chaleurs Railway Company.

(See Annual Report of 1895-96.)

Beauharnois Junction Railway Company.

(See Annual Report of 1895-96.)

Belleville and North Hastings Railway Company.

(See Annual Report of 1888-89.)

Boston and Nova Scotia Coal Company.

(See Annual Report of 1895-96.)

Brockville, Westport and Sault Ste. Marie Railway Company.

(See Annual Report of 1896-97.)

Brantford, Waterloo and Lake Erie Railway Company.

(See Annual Report of 1895-96.)

Buctouche and Moncton Railway Company.

(See Annual Report of 1893-94.)

Canada Atlantic Railway Company.

(See Annual Report of 1888-89 ; also see in present report under head of Ottawa, Arnprior and Parry Sound Railway Company.)

Canada Eastern Railway Co. ; formerly Northern and Western Railway Company of New Brunswick.

(See Annual Reports of 1894-95 and 1899-90.)

Canadian Northern Railway Company.

(See Ontario and Rainy River Railway Company.)

Canadian Pacific Railway Company.

Revelstoke to Arrow Lake.
(See Annual Report of 1896-97.)

Pipestone Branch—Antler Station to Moose Mountain.

(See No. 447.)

By the Subsidy Act 62-63 Vic., ch. 7 (1899), a subsidy of $3,200 a mile, with an addition of 50 per cent on cost in excess of $15,000 per mile, but not exceeding in all $6,400 a mile, was authorized for a railway from some point near Antler Station to a point near Moose Mountain, Man., not exceeding 50 miles.

The Canadian Pacific Railway Company having applied, were admitted to contract for this work on December 18, 1899. During the past fiscal year there has been paid the sum of $92,800. This is the total of payments up to June 30, 1901.

Canadian Pacific Railway Company.

(Crow's Nest Pass Railway.)

(See No. 415.)

By the special Act 60-61 Vic., ch. 5 (1897), authority was given for the grant to the Canadian Pacific Railway Company, of a subsidy towards the construction of a railway from Lethbridge, through the Crow's Nest Pass, to Nelson, such subsidy being to the extent of $11,000 a mile, not exceeding in the whole $3,630,000. A contract for this work was entered into with the company on September 6, 1897. The total distance is 342·75 miles. The road has been built and is in operation from Lethbridge to the south end of Lake Kootenay, a distance of 288·75 miles, except that at one point a temporary way will be replaced by a permanent straightened line. Of the remaining 54 miles to Nelson, the 20 miles between Nelson and Proctor are practically completed. During the past fiscal year the further sum of $205,524 was paid from the subsidy, making the total payments up to June 30, 1901, $3,321,774.

Cap de la Madeleine Railway Company.

(See Annual Report of 1896-97.)

Cape Breton Railway Extension Company.

(See Annual Report of 1895-96.)

(See No. 420.)

By the Subsidy Act of 1899, 62-63 Vic., ch. 7, the grant of a subsidy of $3,200 a mile, with an addition of 50 per cent on the cost in excess of $15,000 a mile, in all not exceeding $6,400 a mile, was authorized in aid of a railway from Port Hawkesbury, on the Strait of Canso, N.S., to St. Peter's, thirty miles.

The above company, having applied, were admitted to contract for the work on September 15, 1900. No portion of the subsidy has been paid up to the close of the fiscal year, June 30, 1901.

Caraquet Railway Company.

(See Annual Report of 1888-89.)

Central Railway Company of New Brunswick.

(See Nos. 40, 143, 156, 205, 353, 382 and 445.)

By the Act of 1884, 47 Vic., ch. 8, a subsidy not exceeding $128,000 was granted in aid of the construction of about 40 miles of the Central Railway, from the head of the Grand Lake to a point on the Intercolonial Railway between Sussex and St. John, N.B.

Under the authority of an Order in Council of June 5, 1886, a contract was made with the Central Railway Company, on July 7, 1886, for a line from Salmon River, at the head of Grand Lake, to Norton, on the Intercolonial Railway; work to be completed by July 1, 1888. Certain work has been executed, but the contract obligations had not been carried out, and no portion of the subsidy was paid. The subsidy lapsed, but was revived by the Subsidy Act, 52 Vict., ch. 3 (1889).

On December 1, 1890, a new contract was made with the company for this work under the Subsidy Act of 1889, the limit of subsidy being $128,000 ; this contract covered also a subsidy for 4½ miles, the limit of which was $14,400, authorized by the Act, 53 Vic., chap. 2, making a total subsidy of $142,400 ; the total length of road subsidized being 44½ miles. The date for completion was fixed as December 1, 1891.

By the Act 51 Vic., chap. 3, a grant as a subsidy to this company was authorized of used iron rails to the value $83,612.54, loaned to the St. Martin's and Upham Railway Company (which railway has been acquired by the Central Railway Company ; the sale being approved by an Order in Council of November 15, 1887), the condition of the grant being that such rails should first be replaced by new steel rails. The new steel rails were substituted, and an Order in Council of October 18, 1889, authorized the transfer of the rails to the company.

By the Subsidy Act of 1894, 57-58 Vic., chap. 4, the grant of a subsidy not exceeding $48,000 to this company was authorized for 15 miles of their railway from Chipman station to the Newcastle coal fields, and a contract for the work was made with the company on September 7, 1895.

By the Subsidy Act 60-61 Vic., chap. 4 (1897), the subsidy of 1894 for the said 15 miles was, in effect, revoted, with addition of 50 per cent of cost over $15,000 a mile, the total subsidy not to exceed $6,400 a mile.

The Subsidy Act 62-63 Vic., chap. 7 (1899), authorized the grant of a subsidy of $3,200 a mile, with an addition of 50 per cent of cost over $15,000 a mile, the total subsidy not to exceed $6,400 a mile for an extension from Newcastle coal fields to Gibson, 30 miles. An agreement was entered into with the company for this work on February 8, 1900.

Up to the end of the fiscal year 1898-99 there had been paid, including the value of the said rails, the sum of $226,012.54. No further payments have been made up to June 30, 1901.

Central Ontario Railway Company.

(See No. 415.)

This company was incorporated by the Ontario Act of 1873, chap. 73, under the name 'The Prince Edward County Railway Company'; the name was changed by the Ontario Act of 1882, chap. 61.

By the Dominion Subsidy Act 62-63 Vic., chap. 7, the grant of aid to the company for 21 miles of railway, from Coe Hill or Rathbun station to Bancroft, was authorized to the extent of $3,200 a mile, with an addition of 50 per cent on the cost in excess of $15,000 a mile; the whole not exceeding $6,400 a mile.

The company were admitted to contract for this work on August 29, 1900, and during the past fiscal year have been paid the sum of $67,200.

Chateauguay and Northern Railway Company.

(See Nos. 507, 508, 509.)

This company was incorporated by the Quebec Act of 1895 (1), chap. 64, its powers of construction being modified by the Act, chap. 75 of 1896.

By the Dominion Subsidy Act of 1900, 63-64 Vic., chap. 8, the grant to this company of a subsidy of $3,200 a mile, with an addition of 50 per cent on the cost in excess of $15,000 a mile, not exceeding in all $6,400 a mile, was authorized for 42 miles of a railway from a point in Hochelaga ward, Montreal, to a point on the Great Northern Railway in or near the town of Joliette, with a spur into that town.

The company were admitted to contract for this work on January 19, 1901.

On the same date they were admitted to contract for two other works, specially subsidized by the same Act, viz., for a railway, vehicular and foot-passenger bridge from Bout de L'Isle to Charlemagne, at the junction of the Rivers Ottawa and St. Lawrence, $150,000, and for a bridge across the Lac Ouareau river, $15,000. No portion of these three subsidies has been paid during the past fiscal year.

Chatham Branch Railway Company.

(See Annual Report of 1893-94.)

Chignecto Marine Transport Company.

(See Annual Report for 1894-95.)

Coast Railway Company of Nova Scotia.

(See No. 403.)

This company was incorporated by the Provincial Act of Nova Scotia, 56 Vic., chap. 154 (1893), to build a line of railway from Yarmouth to Lockeport; a subsequent Act, 59 Vic., chap. 103 (1896), extending its powers.

By the Dominion Subsidy Act, 60-61 Vic., chap. 4 (1897), the grant of a subsidy to this company for 61 miles of their railway from Yarmouth to Port Clyde was authorized, the amount being $3,200 a mile, with an addition of 50 per cent on the cost in excess of $15,000 a mile, the whole subsidy not to exceed $6,400 a mile.

The company were admitted to contract on August 26, 1897, the road to be completed by September 1, 1899.

During the year 1897-98 they were paid the sum of $90,400. No further payments have been made during the past fiscal year.

Cobourg, Northumberland and Pacific Railway Company.

(See Nos. 301, 249, 275 and 378.)

This company was incorporated by the Act 52 Vic., ch. 62 (1889), for the construction of a line of railway from Cobourg Harbour to the River Trent, to the Ontario and Quebec Railway, and to the mining regions of Marmora and Belmont.

By subsequent legislation in 1891, 1892 and 1894, the company's charter has been revived, and powers given for extension to the mineral lands of the county of Hastings, and for leasing the road to the Canadian Pacific Railway Company ; the time for completion being extended to July 9, 1898.

By the Subsidy Act of 1890, assistance to the extent of $96,000 was authorized for 30 miles of the company's railway from Cobourg to the Ontario and Quebec Railway, and by the Subsidy Act of 1892, an additional subsidy of $60,800 was authorized for 19 miles. By the same Act the subsidy voted in 1890 was revoted.

A contract for the construction of the 49 miles subsidized was entered into with the company on June 16, 1894, the date for completion being fixed as August 1, 1896.

By an Order in Council of December 28, 1894, approval has been given to an agreement between the company and the Canadian Pacific Railway Company, dated June 30, 1894, for the lease of the road to the latter company, when completed, for a term of 999 years.

By the Subsidy Act of 1897, 60-61 Vic., ch. 4, in lieu of the subsidies granted by the Act of 1892, a subsidy was authorized for 50 miles of railway from Cobourg to the Ontario and Quebec Railway, namely, $3,200 a mile, with a further subsidy of 50 per cent on cost in excess of $15,000 a mile, the total subsidy not to exceed $6,400 a mile.

Under date April 25, 1898, a contract was entered into with the company for this work, the date for completion to be July 1, 1900.

No payments have been made up to June 30, 1901.

Columbia and Kootenay Railway and Navigation Company.

(Leased to the Canadian Pacific Railway Company.)

(See Annual Report for 1891-92.)

Cornwallis Valley Railway Company.

(See Annual Report for 1891-92.)

Cumberland Railway and Coal Company.

(See Annual Report for 1894-95.)

Dominion Atlantic Railway Company.

(See Western Counties Railway Company.)

Dominion Eastern Railway Company.

(No. 399.)

By the Subsidy Act 60-61 Vic., ch. 4 (1897), the grant of a subsidy was authorized for a railway from Sunny Brae to County Harbour, and from a point at or near Country Harbour Cross Roads to Guysborough, N.S., 65 miles, namely, $3,200 a mile, with an addition of 50 per cent on the cost in excess of $15,000 a mile, not exceeding in all $6,400 a mile.

The Dominion Eastern Railway Company having applied, they were admitted to contract on March 25, 1898, for the work so subsidized. No payments have been made up to June 30, 1901.

Dominion Lime Company.

(See Annual Report for 1888-89.)

Dominion Coal Company.

(See Annual Report for 1895-96.)

Drummond County Railway Company.

(See Nos. 99, 175, 214, 292, 339 and 406.)

By the Railway Subsidy Act of 1888, 50-51 Vic., ch. 24, the grant of aid to an extent not exceeding $96,000, was authorized to the Drummond County Railway Company for 30 miles of their railway from Drummondville towards Nicolet, Quebec.

Under the authority of an Order in Council of November 12, 1887, a contract was made with the company on December 1, 1887, covering a line from the South-western Railway, at the village of Drummondville, to the south-west branch of the River Nicolet.

On May 2, 1889, the company were admitted to contract for the balance, 17½ miles, of the 30 miles subsidized.

By the Subsidy Act of 1889, 52 Vic., ch. 3, the company were further subsidized for 4½ miles from the end of the line already subsidized, to Ball's Wharf, on the River St. Lawrence, to the extent of $14,400, and were admitted to contract on January 21, 1890.

By the Subsidy Act, 53 Vic., ch. 2 (1890), authority was given for a grant of a subsidy, the limit of which was $76,000 for 24 miles of the railway of the company from Drummondville to Ste. Rosalie. Under date February 2, 1891, the company were admitted to contract for this work.

By the Subsidy Act, 55-56 Vic., ch. 5 (1892), authority was given for the grant of a subsidy to the company for 4 6-10 miles from Ball's Wharf to Ste. Rosalie Junction, not exceeding $14,720.

By the Subsidy Act, 57-58 Vic., ch. 4 (1894), authority was given for the grant of a subsidy to this company for 30 miles of railway from St. Leonard northerly towards a junction with the Intercolonial at Chaudière Junction; the limit being fixed at $96,000, and a contract for the work was made with the company on November 14, 1894.

By the Subsidy Act, 60-61 Vic., ch. 4 (1897), the grant of a subsidy to this company of $3,200 a mile for 42½ miles from Moose Park to Chaudière was authorized, with an addition of 50 per cent on the cost exceeding $15,000 a mile, the amount of such subsidy to be refunded to the government in the event of its purchasing or leasing for a term of years their railway from Ste. Rosalie to Chaudière River. A contract was made with the company for this work on December 13, 1897.

Under an agreement dated February 25, 1898, the government, in connection with the extension of the Intercolonial Railway traffic into Montreal, leased from the company their line from Ste. Rosalie to Chaudière, for the period between March 1, and June 30, 1898, with option of renewal for one year, and also option of purchase. Both options were exercised.

The total payments up to June 30, 1895, amounted to $287,936. During the fiscal year, 1898-99 the further sum of $135,000 was paid, as subsidy for the line from Moose Park to Chaudière, making a total of $423,936.

The Act 62-63 Vic., ch 6 (1899), authorized the Government to acquire the property of the company for the sum of $1,600,000, less the subsidy above mentioned; and under date November 7, 1899, the company, by deed, conveyed their railway from Ste. Rosalie to Chaudière, together with the branch from St. Leonard to Nicolet to the Crown accordingly.

East Richelieu Valley Railway Company.

(See Annual Report of 1888-89.)

Elgin, Petitcodiac and Havelock Railway Company.

(See Annual Reports for 1885-86 and 1890-91.)

Erie and Huron Railway Company.

(See Annual Reports for 1886-87.)

Esquimalt and Nanaimo Railway Company.

(See Annual Reports for 1886-87.)

Fredericton and St. Mary's Bridge Company.

(See Annual Report for 1888-89.)

Grand Trunk, Georgian Bay and Lake Erie Railway Company.

(See Annual Report for 1893-94.)

Grand Trunk Railway Company.

(See Nos. 410 and 491.)

By the Subsidy Act, 60-61 Vic., ch. 4 (1891), the grant of a subsidy to the Grand Trunk Railway Company towards the rebuilding and enlargement of the Victoria Bridge over the River St. Lawrence at Montreal was authorized, namely, 15 per cent of the cost of the work, not exceeding $300,000, and a contract to this effect was made with the company on January 14, 1898.

By the Subsidy Act of 1900, 63-64 Vic., ch. 8, authority was given for increasing the grant of assistance to $500,000, on condition that the tariff of tolls for passengers and vehicular traffic should be approved by the Governor in Council. On October 1, 1900, a supplementary agreement was made with the company accordingly.

The work undertaken was the removal of the old tubular iron bridge (a single track bridge) and the erection, without interruption to traffic, of a new steel truss bridge to carry four railway tracks—two for steam locomotives and ordinary railway trains, and two for electric railway purposes—and also two sidewalks; the superstructure to consist of twenty-four spans of through steel trusses, each 254 feet long, and one span of 348 feet.

The new bridge was completed in the fall of 1899, with an expenditure of $1,810,855.69.

During the past fiscal year the sum of $228,371.75 was paid, making, up to June 30, 1901, a total of $500,000, the whole amount of the subsidy granted.

Great Eastern Railway Company.

(See Annual Report for 1896-97.)

Great Northern Railway of Canada, formerly the Great Northern Railway Company.

(Name changed by the Act 62-63 Vic., ch. 68, 1899.)

(See Nos. 33, 37, 72, 79, 154, 215, 231, 308, 309, 346, 371, 380, 405, 407, 413, 416.)

By the Act 47 Vic., ch. 8 (1884), a subsidy not exceeding $32,000 was granted to this company for the construction of a line from St. Jérôme to New Glasgow, Que., the estimated length being ten miles.

Under the authority of an Order in Council of February 3, 1885, a contract for the work was entered into with the company on the 14th of that month, the road to be completed by July 1, 1885.

The line was duly completed and inspected. Under an Order in Council of March 2, 1885, payment was made therefor, namely, 7·84 miles, $25,088.

By the Act 49 Vic., ch. 10 (1886), a subsidy not exceeding $57,600 was authorized for a line from New Glasgow to Montcalm, a distance of about 18 miles. The Great Northern Railway Company having applied for it, it was granted to them by an Order in Council of July 18, 1887, which also approved of the location. The contract was made on August 19, 1887, the road to be completed by August 1, 1890.

By the Act 49 Vic., ch. 10, a subsidy not exceeding $22,400 was granted for a line from St. Andrews to Lachute, Que., 7 miles. For this subsidy the above-named company applied, but no contract was made. The same subsidy was again voted by the Act of 1889, 52 Vic., ch. 3, and under date October 8, 1890, a contract was entered into with them for the work, calling for completion by August 1, 1891. The road was built and allowed to be opened for public traffic in January, 1892.

By the Act 53 Vic., ch. 2 (1890), the grant of a subsidy was authorized, limited to $48,000, for a line from, at or near Montcalm to the Canadian Pacific Railway, between Joliette and St. Félix de Valois, 15 miles.

By the Act 54-55 Vic., ch. 2 (1891), the unpaid balance, $28,100 of the subsidy granted in 1886, was revoted.

By the Act 56 Vic., ch. 8 (1893), the unpaid balance, $25,600 of the subsidy granted in 1891, was revoted, and a new contract for this work was entered into with the company on June 16, 1894.

Also, by the same Act, the subsidy, not exceeding $48,000, granted to the company for 15 miles of their railway from Montcalm to the Canadian Pacific Railway, between Joliette and St. Félix de Valois, by 53 Vic., ch. 2, was revoted, and a contract for this work was entered into with them on June 16, 1894.

By the Subsidy Act, 57-58 Vic., ch. 4 (1894), the grant to this company of a subsidy limited to $96,000, was authorized for 30 miles of railway from a junction with the Lower Laurentian Railway near St. Tite, westwards, in lieu of a subsidy previously granted to the Maskinongé and Nipissing Railway Company. A contract was entered into with the company for this work on September 16, 1895, the railway to be completed by November 30, 1896.

By the Subsidy Act, 60-61 Vic., ch. 4. (1897), payment was authorized of unpaid balances for 67 miles of railway, between Montcalm and the junction with the Lower Laurentian Railway near St. Tite, not exceeding $182,400 ; also a subsidy of 15 per cent, not exceeding $52,500, of the cost of a bridge over the River Ottawa at Hawkesbury. Also, for 9 miles shortage in distance between Montcalm and St. Tite ; also, for 35 miles from St. Jérôme to Hawkesbury ; the last two being subsidies of $3,200 per mile with 50 per cent of expenditure in excess of $15,000 per mile, the total not to exceed $6,400 per mile. Under this Act, an agreement was entered into with the company on September 5, 1898, for the construction of the 67 miles and the 9 miles mentioned, and an agreement under the same Act was made with them on October 12, 1899, for the construction of the 35 miles from St. Jérôme to Hawkesbury.

By the Subsidy Act, 62-63 Vic., ch. 7 (1899), the grant of a subsidy for 53½ miles of the company's railway between Montcalm and St. Tite Junction was authorized ;

also for a branch from their main line to Shawenegan Falls, 6½ miles, such subsidies being of $3,200 a mile with an addition of 50 per cent of cost in excess of $15,000 a mile, the whole subsidy not to exceed $6,400 a mile.

The company were admitted to contract for the above by two separate agreements, that for the branch being dated July 4, 1900, and that for the railway between Montcalm and St. Tite Junction on the 26th of that month.

By the Subsidy Act, 62-63 Vic., ch. 7 (1899), authority was given for the grant of aid to this company towards the construction of three bridges to the extent of 15 per cent of the amount expended ; such subsidies being limited as follows :—

For the bridge across River St. Maurice............	$ 16,425
" " du Loup...............	15,000
" " Maskinongé............	15,000

Contracts in respect of all three bridges were made with the company under date December 21, 1899.

Under date February 28, 1900, a subsidy contract was made with the company for the construction of a bridge across the River Ottawa at Hawkesbury, the subsidy, limited to $52,500, being that authorized by the Act 60-61 Vic., ch. 4 (1897). The line as subsidized and either built or under construction extends from Hawkesbury to St. Tite Junction with the Lower Laurentian Railway, a distance of 225 miles; passing through Grenville, Lachute, St. Jérôme, New Glasgow, Montcalm, Joliette and St. Boniface. The sections between St. Jérôme and Montcalm, 27·84 miles, and 20 miles westward from St. Tite to St. Boniface, on all of which the subsidy was $3,200 a mile, making a total of $153,088, have been built and faid for; also a short line, 6·75 miles from Lachute to St. Andrews, the subsidy for which amounted to $21,600.

During the past fiscal year the subsidy has been paid to the extent of $345,323.11 making the total payments to the company $520,011.11 up to the 30th of June, 1901.

Gulf Shore Railway Company of New Brunswick.

(See Annual Report for 1899-1900.)

Guelph Junction Railway Company.

(See Annual Report of 1888-89.)

Harvey Branch Railway Company.

(See Annual Report of 1889-90.)

Hereford Railway Company (formerly Hereford Branch Railway Company).

(See Annual Report of 1891-92.)

International Railway Company.

(See Annual Reports of 1887-88 and 1889-90.)

Inverness and Richmond Railway Company.

(See Nos. 208, 357 and 400.)

This company was incorporated by the Act of the province of Nova Scotia, 50 Vic., ch. 60 (1887), with powers for the construction of a line of railway between Hawkesbury and a point in the district of Margaree. By the Act of 1888, ch. 79, the location of the line was authorized as from Port Hawkesbury, through Port Hastings, Judique, Port Hood, Mabou and Margaree, to a point at Eastern Harbour, Cheticamp.

By the Subsidy Act, 57-58 Vic., ch. 4 (1894), assistance to the extent of $80,000 was authorized for 25 miles of railway from Port Hawkesbury towards Cheticamp, and the above company was admitted to contract for the work on November 23, 1894, the time for completion being fixed as December 1, 1896.

By the Subsidy Act of 1897, 60-61 Vic., ch. 4, in lieu of the subsidy granted in 1894, a subsidy of $3,200 a mile with an addition of 50 per cent on expenditure in excess of $15,000 a mile, such subsidy in all not to exceed $6,400 a mile, was authorized for a railway from Port Hawkesbury to Port Hood and Broad Cove, 53 miles, and the company was admitted to contract thereunder on April 29, 1898.

During the past fiscal year the sum of $132,800 has been paid, this being the total up to June 30, 1901.

Irondale, Bancroft and Ottawa Railway Company.

(See Nos. 24, 159, 301 and 412.)

By the Act 47 Vic., ch. 8 (1884), the Irondale, Bancroft and Ottawa Railway Company were subsidized, to an extent not exceeding $160,000, for a line about 50 miles long, to connect the Victoria branch of the Midland Railway with the village of Bancroft.

With the sanction of an Order in Council of July 10, 1886, a contract was made with the company on August 19, 1886.

The unpaid balance of subsidy, $145,000, which had lapsed, was revoted by the Act 52 Vic., ch. 3 (1889), and was again revoted by the Act 56 Vic., ch. 2 (1893).

By the Subsidy Act, 60-61 Vic., ch. 4 (1897), in lieu of the subsidy voted in 1893, the sum of $16,000 was voted for the last five miles of this railway as the unpaid balance. The company were admitted to contract on September 20, 1897.

The total payments amounted to $144,000, up to June 30, 1897. No further payments have been made up to June 30, 1901.

Joggins Railway Company.

(See Annual Report for 1891-92.)

Kingston, Napanee and Western Railway Company.

(See Napanee, Tamworth and Quebec Railway.)

Kingston and Pembroke Railway Company.

(See Annual Report for 1884-85.)

Lake Erie and Detroit River Railway Company.

Formerly 'the Lake Erie, Essex and Detroit Railway Company.' Name changed by Dominion Act, 54-55 Vic., ch. 88 (1891).

(See Annual Reports for 1889-90 and 1893-94.)

(See No. 463.)

Up to the end of the fiscal year 1893-94, this company had received subsidies to the extent of $338,731.

By the Subsidy Act, 62-63 Vic., ch. 7 (1899), the grant of a subsidy to this company was authorized, namely, for a line from Ridgetown, Ont., to St. Thomas, 44 miles, the subsidy to be payable only in the event of adequate running rights over the Canada Southern Railway being granted them on terms to be approved by the Railway Committee of the Privy Council.

The matter came before the Railway Committee, who decided that such rights could not be assured on terms that they could approve, and advised that a subsidy contract should be granted to the company.

On the 23rd of June, 1900, the company were admitted to contract accordingly.

No further payments have been made up to June 30, 1901.

L'Assomption Railway Company.

(See Annual Report of 1886-7.)

Leamington and St. Clair Railway Company.

(See Annual Report of 1888-9.)

Lake Temiscamingue Colonization Railway Company.

(See Annual Report of 1896-7.)

Lotbinière and Megantic Railway Company.

(See Annual Report of 1896-7.)

Massawippi Valley Railway Company.

(See No. 442.)

This company was incorporated by the Act of Canada of 1887, ch. 94.

By the Subsidy Act, 62-63 Vic., ch. 7, the grant of a subsidy to this company of $3,200 a mile, with an addition of 50 per cent on cost in excess of $15,000 a mile, but limited, in all, to $6,400 a mile, was authorized for an extension of their railway to the village of Stanstead Plain, P.Q., 2½ miles.

A subsidy agreement was entered into with them for the work on December 18, 1899.

During the past fiscal year the sum of $5,376 has been paid to the company, being the whole amount applicable.

Midland Railway Company.

(See Nos. 336, 421, 427.)

This company was incorporated by the Act of the province of Nova Scotia, 59 Vic., ch. 85 (1896), with power to build a railway from Windsor to a point at or near Maitland, thence, via Clifton, to a point between Truro and Stewiacke, on the Intercolonial; thence to Eastville; with extensions and branches to coal and iron fields, and shipping ports.

By the Dominion Subsidy Act, 57-58 Vic., ch. 4 (1894), authority was given for the grant of a subsidy of $3,200 per mile for 90 miles of railway from Newport or Windsor to Truro, or to a point between Truro and Stewiacke, and from a point on the said railway to a point at or near Eastville, and from Eastville, through the valley of Musquodoboit River, towards a point on the Dartmouth branch of the Intercolonial, in lieu of a subsidy authorized in 1892; also for a railway bridge over the River Shubenacadie, a subsidy of 15 per cent on the value of the structure; the total of the subsidies not to exceed $300,000.

The Midland Railway Company having applied, were admitted to contract for these works on July 30, 1896.

By the Subsidy Act, 62-63 Vic., ch. 7 (1899), in lieu of the foregoing, there was authorized a grant of $3,200 per mile, with a further grant of 50 per cent on cost in excess of $15,000 per mile, up to a limit of $6,400 per mile, for a railway from Windsor, N.S., to Truro via Clifton; and the Midland Railway Company having applied for it they were admitted to contract on December 7, 1899.

During the past fiscal year subsidy has been paid to the extent of $170,264, being the total up to June 30, 1901.

Montfort Colonization Railway Company.

(See Nos. 245, 310, 373 and 411.)

This company was incorporated by the Quebec Act, 53 Vic., ch. 107 (1890), for the construction of a railway from a point on the Canadian Pacific Railway, or the Montreal and Occidental Railway, either from Lachute, St. Jérôme or St. Sauveur, or near the same, to Montfort, and for the continuation of the road to a point on the Rivière Rouge, in the township of Arundel.

By the Subsidy Act, 55-56 Vic., ch. 5 (1892), the grant of a subsidy to this company to the extent of $67,200 was authorized for 21 miles of railway from Lachute, St. Jérôme, or a point at or near St. Sauveur, on the line of the Montreal and Western Railway to Montfort and westward.

By the Subsidy Act, 56 Vic. (1893), this subsidy was revoted, with an addition specifying the gauge as three feet.

On May 16, 1893, a contract was entered into with this company for the construction of 21 miles of railway from St. Sauveur to Montfort and westward, the road to be completed by September 1, 1895.

By the Subsidy Act, 57-58 Vic., ch. 4 (1894), a subsidy to the company was authorized to the extent of $38,400 for 12 miles from the end of the 21 miles previously subsidized, and the company were admitted to contract on July 30, 1896; the River Rouge being the terminal point for the distance subsidized.

By the Subsidy Act, 60-61 Vic., ch. 4 (1897), authority was given for the grant to this company of a subsidy of $2,000 a mile for 33 miles of their railway from Montfort Junction to Arundel; and the company were admitted to contract on December 29, 1897.

The total payments, up to June 30, 1899, amounted to $167,440.

Montreal and Champlain Junction Railway Company.

(See Annual Report for 1892-93.)

Montreal and Lake Maskinongé Railway Company.

(See Annual Report for 1890-91.)

Montreal and Sorel Railway Company.

(See Annual Report for 1892-93.)

Montreal and Western Railway Company.

(See Annual Report for 1893-94.)

Montreal and Ottawa Railway Company.

(Formerly 'the Vaudreuil and Prescott Railway Company.' Name changed by 53 Vic., ch. 58.)

(See Annual Report for 1898-99.)

Napanee, Tamworth and Quebec Railway Company.

(*Name changed to the* **Kingston, Napanee and Western Railway Company** *by the Act 53 Vic., ch. 62.*)

(See Annual Report of 1895-96.)

Nakusp and Slocan Railway Company.

(See Annual Report for 1894-95.)

New Brunswick and Prince Edward Island Railway Company.

(See Annual Report for 1888-89.)

New Glasgow Iron, Coal and Railway Company.

(See Annual Report of 1895-96.)

Northern and Pacific Junction Railway Company.

(See Annual Report of 1890-91.)

Northern and Western Railway Company.

(See Annual Report of 1889-90.)

(Also under the head 'Canada Eastern Railway' in Annual Report of 1894-95.)

Nova Scotia Central Railway Company.

(See Annual Report for 1898-99.)

Nova Scotia Southern Railway Company.

(See Annual Report for 1896-97.)

(See No. 431 and 432.)

No payments were made to this company under the subsidies previously granted, which lapsed ; and in 1899, by the Subsidy Act of that year, 62-63 Vic., ch. 7, the grants of the following were authorized, viz. : For a railway from a point on the Central Railway in the county of Lunenburg, N.S., to the town of Liverpool, via the village of Caledonia, or to the village of Caledonia via Liverpool, or for any part thereof, the whole distance not exceeding 62 miles ; also for a railway from Indian Gardens, Queen's County, N.S., to Shelburne, 35 miles. In each case the subsidy was $3,200 a mile, with an addition of 50 per cent of cost in excess of $15,000 a mile, but not exceeding all $6,400 a mile.

The above company having applied, were admitted to contract under both subsidies, the two agreements being dated January 27, 1900.

No payments have been made up to June 30, 1901.

Ontario and Pacific Railway Company.

(Name changed to Ottawa and New York Railway Company, by 60-61 Vic., ch. 57, 1897.)

(See Nos. 31, 115, 150, 288, 375 and 490.)

By the Act 47 Vic., ch. 8 (1884), the grant of a subsidy to the Ontario and Pacific Railway Company was authorized, namely, to the extent of $262,400, on an estimated distance of 82 miles, for a line from Cornwall to Perth ; and on July 27, 1886, a contract was made with the company, under the authority of an Order in Council of the first day of that month, for the construction of such line, via Newington, Chrysler, Manotick and Franktown ; the road to be completed by July 1, 1888. This subsidy lapsed on July 1, 1888.

By the Act 50-51 Vic., ch. 24, a further subsidy of $19,200 for a further distance of 6 miles was granted.

By the Act 52 Vic., ch. 3 (1889), a subsidy not exceeding $172,400 was authorized to this company for a line from Cornwall to Ottawa.

By the Subsidy Act of 1892, 55-56 Vic., ch. 5, the subsidy granted in 1899 was revoted, the length being set down as 53 87-100 miles. Under date June 1, 1895, a contract was entered into with the company for the construction of this line from Cornwall to Ottawa, 53·87 miles.

By the special Act 60-61 Vic., ch. 57, the name of the company was changed to 'The Ottawa and New York Railway Company,' and its construction powers were extended to July 1, 1901.

By the Subsidy Act 60-61 Vic., ch. 4 (1897), in lieu of the subsidy voted in 1892, a subsidy was authorized of $3,200 a mile, for 53·87 miles from Cornwall to Ottawa, with a further subsidy for expenditure in excess of $15,000 a mile, to an extent of 50 per cent of such expenditure, the total subsidies not to exceed $6,400 per mile.

The company were admitted to contract for the above on December 4, 1897.

At the close of the year 1898-99 they had been paid $172,384.

By the Subsidy Act 63-64 Vic., ch. 8 (1900), the grant of aid to the extent of $90,000 was authorized for the company's bridge over the River St. Lawrence at Cornwall, and on October 10, 1900, they were admitted to contract for the work ; for which, being completed, they have been paid during the past fiscal year the said sum of $90,000, making the total payments to this company, $262,384, up to June 30, 1901.

Ontario and Quebec Railway Company.

(See West Ontario Pacific Railway Company, and Annual Report for 1891-92.)

Ontario and Rainy River Railway Company.

(*Amalgamated with and under the name of the* **Canadian Northern Railway Company** *under the Act 62-63 Vic., ch. 80.*)

(See Nos. 390, 433, 444 and 466.)

This company, incorporated by the Ontario Act 49 Vic., ch. 75, with powers to construct a railway from the town of Port Arthur to Rainy River and certain branches, was declared to be a work for the general advantage of Canada by the Dominion Act 54-55 Vic., ch. 82 (1891), which also extended the time for completion to August, 1898, and ratified agreements made by the company for running powers over the line of the Port Arthur, Duluth and Western Railway Company ; it further gave powers for the construction of a bridge across Rainy River. By the Act 61 Vic., ch. 81, the company were empowered to construct their railway either from Port Arthur or from a point on the Port Arthur, Duluth and Western Railway to a point on the boundary between the provinces of Ontario and Manitoba, and the time for completion of their works was extended.

By the Subsidy Act 60-61 Vic., ch. 4 (1897), a subsidy to this company was authorized towards the construction of 80 miles of their railway from the Port Arthur, Duluth and Western Railway to Rainy Lake, namely, $3,200 a mile, with an addition of 50 per cent, limited to $3,200 a mile, on the cost in excess of $15,000 a mile. This subsidy was definitely increased to $6,400 a mile by the Subsidy Act 62-63 Vic., ch. 7 (1899).

The company were admitted to contract under these two subsidies by agreements dated July 29, 1899, and April 21, 1900, respectively.

By the Subsidy Act 62-63 Vic., ch. 7 (1899), authority was given for the grant to this company of a subsidy of $6,400 a mile for 140 miles of railway from a point 80 miles west of Stanley Station, on the Port Arthur, Duluth and Western Railway, to Fort Frances. The company were admitted to contract thereunder on February 14, 1900.

By the same Act the grant of a subsidy was authorized for 70 miles of railway from Fort Frances to or near the mouth of Rainy River. This company applied and were admitted to contract thereunder on February 14, 1900. By a special covenant in this contract they waived claim to any subsidy for this 70 miles in excess of $3,200 a mile.

Under authority of the Act 62-63 Vic., ch. 80 (1899), the company was amalgamated with, and under the name of, the Canadian Northern Railway Company, the agreement in this regard being approved by an Order in Council of May 4, 1900. The Canadian Northern Railway Company was formed by the amalgamation of the Winnipeg Great Northern Railway Company and the Lake Manitoba Railway and Canal Company under the Act 61 Vic., ch 70 (1898), the agreement for that purpose being approved by an Order in Council of January 13, 1899. With the same company there is also amalgamated the Manitoba and South Eastern Railway Company under the Act 62-63 Vic., ch. 75 (1899), the agreement to that effect being approved by an Order in Council of May 2, 1900. The above railways are comprised in the Canadian Northern Railway system and under the name of that company.

During the past fiscal year paymnts of subsidies have been made to the extent of $537,600, the total amount paid up to June 30, 1901.

Ontario, Belmont and Northern Railway Company.

(See Annual Report for 1896-97.)

Orford Mountain Railway Company.

(See Annual Reports for 1893-94 and 1894-95.)

Ottawa and New York Railway Company.

(See Ontario and Pacific Railway Company,)

Ottawa, Arnprior and Parry Sound Railway Company.

(*Now the* **Canada Atlantic Railway Company,** *by amalgamation, under the Act 62-63 Vic., ch. 81 (1899.)*

(See Annual Report for 1898-99.)

Ottawa and Gatineau Valley Railway Company.

(*Name changed to the* **Ottawa and Gatineau Railway Company,** *by the Act 57-58 Vic., ch. 87, which consolidated and amended Acts relating to the company*).

(*Name further changed to the* **Ottawa Northern and Western Railway Company,** *by the Act 1 Edw. VII., ch. 80.*)

(See Nos. 8, 26, 58, 151, 305, 349, 379, 409, 414 and 492.)

By the Act 48-49 Vic., ch. 29 (1885), the grant of a subsidy to this company was authorized (in lieu of subsidies granted in previous years), namely, for a line of railway from Hull station towards the village of Le Désert, 62 miles, the amount being $320,000. The subsidy having lapsed, it was revoted by the Act 52 Vic., ch. 3 (1889).

Under authority of an Order in Council of July 10, 1889, a contract with the company for the work in question, 62 miles, was signed on August 19, 1889.

By the Subsidy Act, 56 Vic., ch. 2 (1893), the unpaid balance, $89,248, was revoted.

By the Subsidy Act, 57-58 Vic., ch. 6 (1894), authority was given for subsidizing, to the extent of $64,000, a further distance of 20 miles from the end of the 62 miles already subsidized, and a contract for the work was entered into with the company on October 7, 1895.

By the Subsidy Act, 60-61 Vic., ch. 4 (1897), in lieu of this subsidy, the said 20 miles was subsidized to the extent of $3,200 per mile, with a further subsidy of 50 per cent of the expenditure in excess of $15,000 a mile; the total subsidy not to exceed $6,400 a mile.

The company were admitted to contract under this subsidy on July 29, 1899.

By the Subsidy Act, 60-61 Vic., ch. 4 (1897), the unpaid balance, $35,872, of the vote of 1893 was revoted, and a contract was made with the company thereunder on July 29, 1899.

The total payments up to June 30, 1894, amounted to $284,128. No further payments have been made up to June 30, 1901.

Under dates September 21, 1899, and November 26, 1900, contracts were entered into for the construction, under subsidy, of a bridge across the River Ottawa at Ottawa, being made with this company conjointly with the Pontiac Pacific Junction Railway Company (which see.)

Ottawa Northern and Western Railway Company.

(See Ottawa and Gatineau Valley Railway Company.)

Oshawa Railway and Navigation Company

(*Name changed to the* **Oshawa Railway Company,** *by 54-55 Vic., ch. 91.*)

(See Annual Report for 1895-96.)

Parry Sound Colonization Railway Company.

(See Annual Report for 1895-96.)

Pembroke Southern Railway Company.

(See Annual Report for 1899-1900.)

Philipsburg Junction Railway and Quarry Company.

(See Annual Report for 1894-95.)

Now the **Philipsburg Railway and Quarry Company.** *Name changed by 58 Vic., ch. 65 (1895).*

(See Annual Report for 1899-1900.)

Port Arthur, Duluth and Western Railway Company.

(*Formerly the* Thunder Bay Colonization Railway Company.)

(See Annual Report for 1892-93.)

Pontiac and Renfrew Railway Company.

(See Annual Report for 1899-1900.)

Pontiac Pacific Junction Railway Company.

(See Nos. 25, 138, 211, 294, 329, 330, 331, 385, 408 and 492.)

This company was incorporated by the Dominion Act 43 Vic., ch. 55 (1880), with powers to construct a railway from a point on the line of the Quebec, Montreal, Ottawa and Occidental Railway, at or near Hull or Aylmer, to a point in the county of Pontiac, suitable for crossing the River Ottawa, thence to Pembroke to connect with the Canada Central Railway.

The Act 45 Vic., ch. 69, gave authority for the construction of a bridge across the River Ottawa.

This line was subsidized in 1884, by 49 Vic., ch. 8, to the extent of $3,200 a mile, not exceeding $272,000.

Under authority of an Order in Council, dated December 12, 1884, a contract dated the 22nd of that month, was made with this company for the building of the line subsidized, namely, from Aylmer to Pembroke, crossing the River Ottawa at a point 'not east of Lapasse ;' the first twenty-seven miles to be completed by September 1, 1885 (extended to December 15, by an Order in Council of August 13, 1895), the second twenty-seven miles by July 1, 1886, and the whole road, estimated at eighty-five miles west of Aylmer, by July 1, 1887.

By the Act, 51 Vic., ch. 3 (1888), a subsidy to this company of $31,500 was authorized for the bridging of the River Ottawa at Culbute ; also a subsidy of $9,600 for 3 miles of their railway from a point 3 miles east of Pembroke to Pembroke, provided that the entire work subsidized on this railway be completed within four years from May 22, 1888.

By the Act 53 Vic., ch. 2 (1890), a subsidy, limited to $24,000 was authorized for 7½ miles of this railway, between Hull and Aylmer.

By the Act 63 Vic., ch. 69 (1890), the time for completion of the railway to the town of Pembroke, and of the bridge over the River Ottawa, at or near the city of Ottawa, which the company were empowered to construct by the Act 45 Vic., ch. 69, was extended to May 22, 1892. The same Act gave the company power to extend their line from the said bridge to the canal basin in the city of Ottawa.

The Act 53 Vic., ch. 69 (1890), gave to this company power to purchase from the Canadian Pacific Railway Company the section between Hull and Aylmer, or any part thereof.

By the Subsidy Act 55-56 Vic., ch. 5, clause 4 (1892), the balance unpaid of the subsidy voted in 1884 was revoted ; and by the special Act of 1892, ch. 56, the time for the commencement of a bridge over the River Ottawa, at or near Ottawa, was extended for two years, and its completion for five years from July 9, 1892. The time for the completion of the line to Pembroke was also extended for four years from that date.

By the Subsidy Act 57-58 Vic., ch. 4 (1894), the subsidies voted in 1888 were revoted, subject to the condition that the entire work subsidized on this railway should be completed within four years.

By the same Act the unpaid balance of the subsidy voted by ch. 8 of the Act of 1884, less $24,000 for the 7½ miles from Hull to Aylmer, was revoted, namely, $73,172.

By the same Act the sum of $24,000, voted for the road from Hull to Aylmer in 1890, was, in effect, revoted.

By the Subsidy Act 60-61 Vic., ch. 4 (1897), the unpaid balances of the subsidies for 85 miles from Aylmer to Pembroke, and for bridging the River Ottawa, granted by the Acts of 1894, such balances amounting to $114,272, were revoted. A contract was made with the company thereunder on July 29, 1899.

By the same Act the subsidy for 7½ miles from Hull to Aylmer, revoted by the Act of 1894, was, in effect, revoted, with the addition of 50 per cent on expenditure in excess of $15,000 per mile, the total of the subsidies not to exceed $6,400 per mile. The company were admitted to contract thereunder on July 29, 1899.

By the end of the fiscal year, 1894-95 the total subsidy paid amounted to $193,578. No further payment has been made under the above subsidies up to June 30, 1901.

By the Subsidy Act 60-61 Vic., ch. 4 (1897), authority was given for the grant of subsidy for a railway and traffic bridge over the River Ottawa at Ottawa, to the extent of 15 per cent of its cost but not exceeding $112,500. A contract thereunder was made with the Pontiac Pacific Junction Railway Company and the Ottawa and Gatineau Railway Company, jointly, on September 21, 1899. This subsidy was increased to $212,500 by the Subsidy Act of 1900, on the condition that free vehicular and foot passenger facilities should be provided, and a further contract was made with the companies named on November 26, 1900.

During the past fiscal year, the bridge and its approaches being fully completed, the whole of the subsidy for it was paid, namely, $212,500.

The structure is composed of one cantilever span of 555:9 feet, two anchor arm spans of 247 feet each, one truss span of 247 feet and one of 140 feet, with a long steel trestle approach. It comprises a single railroad track, two tramway tracks and two roadways for ordinary traffic.

Quebec Bridge Company.

(See No. 467.)

This company was incorporated by the Dominion Act 50-51 Vic., ch. 98 (1887), with powers to construct a railway bridge over the River St. Lawrence near Quebec, and to arrange the same for the use of foot passengers and vehicles, and to construct and operate lines of railway to connect with existing or future lines of railway on each side of the river.

By the Act 60-61 Vic., ch. 69 (1897), the powers of the company were revised, and the time for construction was extended to June 29, 1902.

By the Act 63-64 Vic., ch. 115 (1900), the time for completion was extended to June 14, 1905, and the company were further empowered to arrange for the placing of electric wires on the bridge and connecting railways, and for the passage of electric street railway or tram cars.

By the Railway Subsidy Act 62-63 Vic., ch. 7 (1899), the grant of a subsidy to this company of $1,000,000 was authorized, for a railway bridge over the River St. Lawrence at Chaudière Basin, and by the Act of 1900, ch. 8, clause 10, it was made applicable, one-third to the substructure and approaches and two-thirds to the superstructure.

On November 12, 1900, the company were admitted to contract for this subsidy work.

The site and plans of the bridge were approved by the Railway Committee of the Privy Council, and by an Order in Council dated May 16, 1898.

The structure is to be a cantilever bridge, composed of two approach spans of 220 feet each two anchor spans of 500 feet each, and a centre span of 1,800 feet from centre to centre of the piers. The under side of the bridge will give a height of 150 feet above high water. The pneumatic system is adopted in the construction of the piers. When completed, it will comprise a double track railroad, two lines for electric tramways, and two ordinary roads for vehicles and foot passengers.

The company have been paid a total of $75,000 up to June 30, 1901.

Quebec Central Railway Company.

(See Annual Report of 1895-96.)

Quebec and Lake St. John Railway Company.

(See Annual Report of 1895-96.)

Quebec, Montmorency and Charlevoix Railway Company.

(See Annual Report for 1894-95.)

Restigouche and Western Railway Company.

(See No. 384.)

This company was incorporated by the Act of the province of New Brunswick, 60 Vic., ch. 82 (1897), with powers to construct a railway from Campbellton, to a point on the River Saint John between Grand Falls and Edmundston.

By the Subsidy Act 60-61 Vic., ch. 4 (1897), there was authorized a subsidy for a railway from Campbellton, on the I.C.R., towards Grand Falls, N.B., 20 miles,

$3,200 a mile, with an addition of 50 per cent on the cost in excess of $15,000 a mile ; the whole not to exceed $6,400 a mile. This was in lieu of a previous subsidy to a specified company.

The Restigouche and Western Railway Company having applied were admitted to contract for the work on December 24, 1897. The total payments up to June 30, 1900, amounted to $46,930 ; no further payment has been made during the past fiscal year.

Schomberg and Aurora Railway Company.

(See No. 386.)

This company was incorporated by the Dominion Act 59 Vic., ch. 34 (1896), with powers to build a line of railway from a point on the Grand Trunk Railway between King and Newmarket to the village of Schomberg.

By the Subsidy Act 60-61 Vic., ch. 4 (1897), the grant of a subsidy of $3,200 a mile for 15 miles between the point named above, with addition of 50 per cent of the cost in excess of $15,000 a mile, but not exceeding in all $6,400 a mile was authorized.

A subsidy agreement was entered into with the company accordingly on July 29, 1899.

No payments have been made up to June 30, 1901.

Shuswap and Okanagan Railway Company.

(See Annual Report of 1894-95.)

South Norfolk Railway Company.

(See Annual Report of 1888-89.)

South Shore Railway Company.

(See Annual Report of 1896-97.)

South Shore Railway Company, Quebec.

(See Nos. 441, 468, 469 and 513.)

This company was incorporated by the Quebec Act of 1894, ch. 72, and this undertaking was declared to be a work for the general advantage of Canada by the Dominion Act, 60 Vic., ch. 10 (1896), which authorized the construction of a line of railway from a point in the town of Lévis to a point on the Canada Atlantic Railway at or near Valleyfield.

By the Subsidy Act, 62-63 Vic., ch. 7 (1899), the grant of a subsidy to this company for 82 miles of railway from Sorel Junction to Lotbinière was authorized, $3,200 a mile, with an addition of 50 per cent of cost in excess of $15,000 a mile, but not exceeding in the whole $6,400 a mile. The company were admitted to contract for this work on May 9, 1900.

By the same Act the grant of a subsidy was authorized towards the construction of a bridge over the River Richelieu at Sorel, not exceeding $35,000. The company were admitted to contract for this work on December 23, 1899.

By the same Act the grant of a subsidy to this company was authorized towards the renewal of the railway bridge over the River Yamaska at Yamaska, the amount being $50,000. They were admitted to contract for the work on May 9, 1900.

By the Subsidy Act, 63-64 Vic., ch. 8 (1900), the grant of subsidy to the extent of $50,000 was authorized for a railway bridge over the River St. Francis, such bridge to be free to foot passengers and vehicles. A contract was entered into with the company for the work on June 29, 1901.

During the past fiscal year there was paid the sum of $88,400, making the total payments up to June 30, 1901, $119,290.19. This, however, includes the sum of $16,164.63 for completing the Montreal and Sorel Railway (see report of 1899-1900).

St. Catharines and Niagara Central Railway Company.

(See Annual Report for 1895-96.)

St. Clair Frontier Tunnel Company.

(See Annual Reports of 1890-91 and 1891-92.)

St. Gabriel de Brandon and Ste. Emélie de l'Energie Railway Company.

See (No. 381.)

By the Subsidy Act, 60-61 Vic., ch. 4 (1897), in lieu of a previous subsidy authorized in 1894, a subsidy of $3,200 a mile, with an addition, not exceeding $3,200 a mile, of 50 per cent of cost in excess of $15,000 a mile, was authorized to be granted to this company for 15 miles of railway from St. Gabriel to Ste. Emélie de l'Energie and for 5 miles from a point on the main line to St. Jean de Matha.

A subsidy agreement for this work was entered into with the company on July 29, 1899.

No portion of the subsidy has been paid up to June 30, 1901.

St. John Valley and Rivière du Loup Railway Company.

(See Annual Report for 1893-94.)

St. Stephen and Milltown Railway Company.

(See Annual Report for 1895-96.)

(No. 393.)

A further subsidy to this company was authorized by the Act 60-61 Vic., ch. 4 (1897), namely, for 41 miles of their railway from Milltown to St. Stephen, $3,200 a mile, with 50 per cent additional on the cost in excess of $15,000 a mile, not exceeding in all $6,400 a mile. The company were admitted to contract for this work on September 29, 1897. Under the previous subsidy $14,848 was paid. No payments have been made under the present subsidy up to June 30, 1901.

Stewiacke Valley and Lansdowne Railway Company.

(See Annual Report for 1895-96.)

St. Lawrence and Adirondack Railway Company.

(See Annual Report for 1893-94.)

(No. 394.)

A further subsidy to this company was authorized by the Act 60-61 Vic., ch. 4 (1897), namely, for 13½ miles of their railway from Beauharnois to Caughnawaga, $3,200 a mile, with an addition of 50 per cent on expenditure in excess of $15,000 a mile, such subsidy not to exceed in the whole $6,400 a mile.

The company was admitted to contract on October 16, 1897. No payments have been made under this subsidy up to June 30, 1901. The payments under the previous subsidy aggregated $149,481.60.

St. Lawrence, Lower Laurentian and Saguenay Railway Company.

(*Name changed to* **Laurentian Railway Company** *by Provincial Act 51-52 Vic., ch. 108.*)

(See Annual Report for 1891-92.)

St. Louis and Richibucto Railway Company.

(See Annual Report for 1884-85.)

St. Mary's River Railway Company.

(See No. 495.)

This company was incorporated by the Dominion Act 63-64 Vic., ch. 79 (1900), with powers to construct a railway from some point between Lethbridge and Sterling, on the railway of the Alberta Railway and Coal Company, to some point on the international boundary between ranges 24 and 30 west of the fourth meridian, N.W.T., and, with the approval of the Governor General in Council, to build branches, limited to 15 miles in length each.

By the Subsidy Act of 1900, 63-64 Vic., ch. 8, the grant of aid to the extent of $2,500 a mile for 30 miles of railway, from the Alberta Railway and Coal Company's Railway, towards Cardston, Alberta, was authorized, and the above company having applied for it, they were admitted to contract on September 10, 1900.

Up to June 30, 1901, they have been paid subsidy to the extent of $75,000.

Témiscouata Railway Company—Rivière du Loup to Edmundston.

(See Annual Report for 1892-93.)

Thousand Islands Railway Company.

(See Annual Report for 1895-96.)

By the Subsidy Act 63-64 Vic., ch. 8 (1900), a further subsidy was authorized for 2 miles of an extension from the present northerly terminus, $3,200 a mile, with an addition of 50 per cent on cost in excess of $15,000 a mile, not exceeding in all $6,400 a mile.

A contract was made with the company accordingly on March 15, 1901 : no payment has been made during the past fiscal year.

Tilsonburg, Lake Erie and Pacific Railway Company.

(See Annual Report for 1895-96.)

(No. 387.)

A further subsidy to this company was authorized by the Act 60-61 Vic., ch. 4 (1897), namely, for 3·50 miles from the then terminus, through Tilsonburg to the Michigan Railway, $3,200 a mile, with an addition of 50 per cent of the cost in excess of $15,000 a mile, the whole not to exceed $6,400 a mile.

Under date, December 4, 1897, the company were admitted to contract. During the past fiscal year the sum of $7,159.48 was paid from this subsidy, making, with their previous subsidy of $51,200, paid in 1895-96, a total of $69,271.48, up to June 30, 1901.

Tobique Valley Railway Company.

(See Annual Report for 1893-94.)

Toronto, Grey and Bruce Railway Company.

(See Annual Report for 1887-88.)

United Counties Railway Company.

(See Nos. 297, 344 and 393.)

This company was incorporated by the Quebec Act 46 Vic., ch. 90 (1883), for the construction of a railway from a point on the line of the Montreal, Portland and Boston Railway, at Richelieu, to a point on the River Richelieu and the River St. Lawrence.

By the Subsidy Act 56 Vic., ch. 2 (1893), a subsidy to the extent of $102,400 for 32 miles between Iberville and St. Hyacinthe, and beyond, toward Sorel, was authorized.

On August 19, 1893, a contract was entered into with the company for this work.

By the Subsidy Act 57-58 Vic., ch. 4 (1894), a subsidy, limited to $102,400, was authorized for a further distance of 32 miles, and on October 23, 1894, a contract was made with the company for the work, covering the whole distance from St. Hyacinthe to Sorel.

By the Act 60-61 Vic., ch. 4 (1897), the grant of a subsidy of $3,200 a mile, with an addition of 50 per cent on the cost in excess of $15,000 a mile, not exceeding in all $6,400 a mile, was authorized for one mile of this company's railway from Johnson to St. Grégoire station.

During the past fiscal year no payments were made, leaving the total payments $188,816, up to June 30, 1901.

Vaudreuil and Prescott Railway Company.

(See *Montreal and Ottawa Railway Company.*)

Waterloo Junction Railway Company.

(See Annual Report for 1891-92.)

Western Counties Railway Company.

(*Name changed to* **The Yarmouth and Annapolis Railway Company** *by 56 Vic., ch. 63.*)

(*Name further changed to* **The Dominion Atlantic Railway Company** *by 57-58 Vic., ch. 69.*)

(See Annual Report for 1894-95.)

West Ontario Pacific Railway Company.

(*Leased to Ontario and Quebec Railway Company—C. P. R.*)

(See Annual Report of 1890-91.)

Woodstock and Centreville Railway Company.

(See Annual Report for 1895-96.)

Yarmouth and Annapolis Railway Company.

(See *Western Counties Railway Company.*)

York and Carleton Railway Company.

(See No. 423.)

This company was incorporated by the Act of New Brunswick, 1887, ch. 44.

By the Subsidy Act 62-63 Vic., ch. 7 (1899), the grant of a subsidy of $3,200 a mile, with a further subsidy of 50 per cent on the cost in excess of $15,000 a mile, the total subsidy not to exceed $6,400 a mile, was authorized for 6 miles of railway from Cross Creek Station, on the Canada Eastern Railway, to Stanley village, N.B., for which this company applied.

A subsidy agreement thereunder was entered into with them on November 23, 1899.

No payments have been made up to June 30, 1901.

LAND SUBSIDIES.

A number of companies have been aided by subsidies in land, duly authorized by Parliament and granted by the Department of the Interior, to whose report reference must be had for information as to their position. Certain details in respect of these roads will, however, be found in the annual report of this department for 1895-96.

CANALS.

The total expenditure charged to Capital Account on the original construction and the enlargement of the several canals of the Dominion, up to June 30, 1901, was $81,404,543.98. A further sum of $17,218,448.67 has been expended on the repairs, maintenance and operation of these works, making a total of $98,622,992.65.* The total revenue derived, including tolls, and rentals of lands and water powers, amounted to $12,717,343.01. (See the Accountant's statements, Part II., p, 28, 41 and 45.)

The total expenditure for the fiscal year ended on June 30, 1901, including 'canals in general,' was as follows :—

On construction and enlargement a total of $2,514,214.93, and a further sum of $638,909.72 for repairs, renewals, and operation, making a total for the year of $3,153,124.65.

The total net revenue collected for the fiscal year was $315,425.69, a decrease compared with the net revenue of the previous year of $7,217.87. The net canal tolls amounted to $26,129.40, a decrease of $11,404.42. On July 1, 1900, the balance of rents unpaid was $68,736.52. The rents accrued during the year amounted to $60,034.92, and the rents received to $54,386.82, an increase of $4,277.78, leaving a balance of rents uncollected on June 30, 1901, amounting to $70,760.32.

The total expenditure on canal staff and maintenance, repairs and renewals amounted, for the year, to $638,909.72, a decrease of $72,690.34, and the total net receipts amounting as above, to $315,425.69, the amount of expenditure in excess of receipts was $323,484.03, compared with an excess expenditure the previous year of $388,957.20.

The above figures relate to the fiscal year 1900-1901, but very voluminous statistics relating to the canal traffic, and various commercial statistics for the *season of navigation* of the year 1900, will be found in Part V., 'Canal Statistics.'

The total traffic through the several canals of the Dominion for the season of 1900, amounted to 5,013,693 tons, a decrease of 1,212,231 tons compared with the previous year. This includes 2,035,667 tons passing through Sault Ste. Marie Canal, which is free of toll.

The following features of the principal canal traffic during the season of 1900, will be of interest :—

On the Welland Canal, 719,360 tons of freight were moved, a decrease of 70,410 tons, of which 379,658 tons were agricultural products, a decrease of 82,865 tons, and 115,217 tons produced of the forest ; of coal, 47,392 tons were carried. 601,130 tons passed eastward and 118,230 westward ; 688,557 tons were through freight, of which 579,312 tons passed eastward.

Of this through freight, Canadian vessels carried 319,497 tons, an increase of 9,911 tons, and United States vessels 369,060 tons, a decrease of 91,012 tons.

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* These figures give the aggregate expenditure on specific canals and also include the sum of $232,851.01 miscellaneous canal expenditures.

The total freight passed eastward and westward through this canal from United States ports to United States ports was 318,529 tons, a decrease of 42,000 tons compared with the year 1899.

The quantity of grain passed down the Welland and the St. Lawrence canals to Montreal was 244,661 tons, a decrease of 88,085 tons compared with the previous year; of this, 38,403 tons were transhipped at Ogdensburg, as against 48,828 tons transhipped in 1899. The further quantity of 51,267 tons of grain passed down the St. Lawrence canals, only, to Montreal, making the total 295,928 tons.

The rate of toll on grain for passage through the Welland (giving free passage through the St. Lawrence canals), was 10c. a ton.

On the St. Lawrence canals, 1,115,171 tons of freight were moved, a decrease of 233,922; of which 667,584 were eastbound through freight, and 29,979 tons westbound through freight; 693,734 tons were agricultural products, 437,423 tons merchandise, 375,239 tons coal, and 95,518 tons forest products.

Fifteen cargoes of grain, aggregating 7,924 tons, were taken down direct to Montreal through the Welland and St. Lawrence canals, as against two cargoes, aggregating 558 tons, in 1899.

On the Ottawa River canals, the total quantity of freight moved was 389,145 tons, a decrease of 130,960, of which 378,801 tons were produce of the forest.

On the Chambly Canal, 348,561 tons were moved, a decrease of 14,074, of which 205,160 tons were produce of the forest, and 92,598 tons coal.

On the Rideau Canal, 75,432 tons were carried, an increase of 5,527; 37,925 tons being the product of the forest, and 17,292 tons coal.

On the St. Peter's Canal, 73,813 tons were carried, an increase of 3,009, of which 42,548 tons were merchandise, and 32,418 tons coal.

On the Murray Canal, 19,067 tons passed, an increase of 2,279, and 4,496 tons of this were the product of the forest.

On the Trent Valley Canal, 43,572 tons were moved, of which 42,292 tons were the product of the forest.

On the Sault Ste. Marie Canal, the total movement of freight was 2,035,677 tons, being a decrease of 970,987 tons, carried in 3,081 vessels, the number of lockages being 2,205. Of wheat, 9,291,114 bushels, and of other grain 1,113,414 bushels were carried; 647,944 barrels of flour, 999,591 tons of iron ore, 530,298 tons of coal, and 7,435,806 feet, board measure, of lumber; all these items show a considerable decrease. The total traffic at this point, accommodated by the two canals, the American and Canadian, amounted to 25,643,031 tons, an increase of 384,228 tons, carried in 19,450 vessels, a decease of 779. The total quantity of wheat carried was 40,616,807 bushels, a decrease of 17,684,875, and of other grain 16,439,208 bushels, a decrease of 13,898,147. Of lumber, the total was 905,528,806 feet, board measure, a decrease of 127,073,194.

As having an interesting bearing on the question of canal versus railway transport of grain from the west, it may be noted that whereas grain and peas passed down to Montreal through the Welland and St. Lawrence canals to the extent of 244,661 tons, a decrease of 88,085 tons, compared with the previous year, the quantity carried to Montreal via the Canadian Pacific and Grand Trunk Railways amounted to 229,624 tons, an increase of 20,454 tons. In addition, during the past three seasons, a new system of grain traffic has come into operation, viz., from Depot Harbour, on Georgian Bay, Lake Huron, over the line of the Canada Atlantic Railway to Coteau Landing, at the head of the Soulanges Canal, thence by barge to Montreal. In the season of 1899, the total freight carried by this route to Montreal was 309,573 tons, of which 259,531 tons were grain. In the season of 1900, 319,865 tons were carried, of which 303,259 tons were grain (including 153 tons of peas and buckwheat). Of the grain so carried in 1899, 66,635 tons were wheat and 174,932 corn, and in 1900, 126,963 tons were wheat and 154,815 tons corn.

The quantity of grain carried to tidewater on the New York State canals was 308,945 tons, a decrease of 107,755 tons, while the quantity carried by the railways of the state to tidewater amounted to 4,396,441 tons, a decrease of 246,511.

Of the total east and west-bound freight carried by the canals of the State of New York (the Erie, the Champlain, the Black River, the Cayuga and Seneca and the Oswego) and the competing railways (the New York Central and the Erie Railroad) respectively (amounting in 1900 to 65,433,541 tons—greater by 13,730,780 tons than in 1899), the proportion carried by the canals has fallen steadily from 68·9 per cent in 1859 and 47·0 per cent in 1869, to 6·8 per cent in 1898, 7·2 per cent in 1899, and 5·2 in 1900. These canals carried, in 1900, 3,345,941 tons, a decrease of 340,110 tons ; of this quantity, 857,607 tons were through freight eastwards to tidewater, 596,246 tons coming through the Erie Canal. This eastward bound through freight is answerable for the total decrease to the extent of 307,058 tons.

The falling-off in the United States canal traffic is officially ascribed to the rate war between shippers and boatmen, the unusually late opening of navigation, the strike in the coal regions, which reduced shipments, and the fact that a number of old boats were put out of commission on account of their condition, and there were but few boats built to take their place, owing to uncertainty as to the action that might be adopted in regard of improvement to canal navigation.

In attempting to draw deductions from the above figures in dealing with the great question of waterways versus railways as freight carriers, the dimensions of these United States canals, their length, and the difficulties of lock passage must be kept in mind. The enlarged Erie Canal between Buffalo and Albany, which is, of course, the main factor, is 350½ miles long, comprises 72 locks, 110 x 18 feet, with a depth of seven feet of water, accommodating, as a maximum, vessels of 240 tons burden.

On the opening of navigation in the spring of 1900, by means of the enlarged Canadian canal systems and the intermediate waterways (though not fully completed), a minimum depth of fourteen feet of water from Lake Superior to the head of ocean navigation at Montreal was afforded.

The extent of the improved facilities of communication so obtained, and their value to commercial interests may be understood from the fact that in place of the old limit of lock dimensions, viz., length, 200 feet; width, 45 feet; depth of water on the sills, 9 feet, the enlarged locks are 270 feet in length, 45 feet in width, with 14 feet of water on the sills, accommodating vessels 255 feet long and 44 feet wide. As an index to the carrying power of the new canal works, it may be observed that a typical vessel, the propellor *Aragon*, whose length is 247 feet and width 42.6 feet, has passed through the enlarged Welland Canal, drawing 14 feet of water and carrying 2,212 tons of corn.

The through route between Montreal and Port Arthur, at the head of Lake Superior, now open as a 14-foot navigation, comprises 73 miles of canal, with 48 locks, and 1,150 miles of river and lake waters, or a total of 1,223 miles. To Duluth the total distance is 1,357 miles, and to Chicago 1,286 miles. A summary of this route will be found in the Chief Engineer's report, Part I., and further details of the several works in the pages immediately following.

The approaches to the canals and the channels through the intermediate river reaches are well defined, and are lighted with gas buoys, admitting of safe navigation, if in the hands of competent pilots, both by day and night. In the case of the Soulanges Canal, the canal is well lighted throughout by electricity, and will next season be operated by the same power; contracts have been made for electrical installation for similar purposes on the Cornwall and Lachine canals.

The time has not yet arrived, though probably it is not far distant, for appraising the full value of the Canadian through canal system from Lake Superior to tidewater. The decrease for the season of 1900, noted in the case of the canals of the State of New York, was shared by the Canadian route, and probably the causes were, in some respects, similar. The facilities for the passage of vessels of large tonnage are now, it is true, in good working order, but any great increase in traffic cannot be looked for until the last contractor's dredge has been moved out of these waters, and the full system of channel buoying and lighting has been completed, as time and experience may show its requirements; further, until the pilots acquire the necessary experience and confidence (a point the importance of which can hardly be over-estimated), and, lastly, until ship-owners build in greater numbers the larger type of vessel which this route is capable of accommodating. *

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*NOTE.—From 'the Blue-book of American Shipping," 1900.

'The approximate value of vessels built in ship yards of the great lakes during the past year is $10,500,000. Nearly all of these vessels are steel freight steamers of 450 to 500 feet in length and of 7,000 to 8,000 net tons capacity, equipped with quadruple engines of 1,800 to 3,000 horse power, and in most cases with water tube boilers. The year has, of course, been one of the most prosperous in the history of lake ship building, on account of the boom in iron and steel lines. There are still a large number of ships under construction in the lake yards, some of them not to come out until the spring of 1901, and there is every reason to expect, in view of the profits assured to ship owners, by reason of contracts made last fall, a renewal of orders that will give the yards nearly as much work for another winter as they have had in the past year.

The advantages, however, of the Canadian route are so enormously preponderant, that appreciation of its commercial value is simply a question of time. Considerable progress has been made with the improvements at Port Colborne, the Lake Erie entrance of the Welland Canal. These improvements comprise the deepening of the approach to the canal to 22 feet, and the construction of two docks, with piers, 200 feet wide, upon which grain elevators will be erected for the transference of grain to vessels adapted to the canal navigation, when required. In addition to the works undertaken by this department a breakwater, about a mile in length, is being constructed across the entrance to the harbour by the Department of Public Works, who will also dredge out the area so contained, thus greatly increasing the accommodation, and ensuring safety at this important point.

The deepening of the approaches to the Sault Ste. Marie is being carried on at the lower entrance. The present depth of these approaches is limited to the accommodation of vessels of 17 feet 6 inches draught; they will be deepened to 21 feet 6 inches, thus enabling the depth of the lock (which is the same as that of the United States lock, on the other side of the river) to be utilized to its full extent.

The construction of the new works for the improvement and extension of the Trent Canal system is proceeding. When the present contracts are completed, a six feet navigation will be afforded from Lake Simcoe to Heely's Falls, a distance of about 160 miles, leaving the portion between Heely's Falls and Lake Ontario, and the portion from the head of Lake Simcoe to Georgian Bay, Lake Huron, still to be dealt with; the total distance between the Bay of Quinté, Lake Ontario and Georgian Bay is about 192 miles.

During the years 1899 and 1900, under special appropriations voted by parliament, surveys have been conducted on the upper River Ottawa with a view to ascertaining the feasibility and probable cost of constructing a canal system, which will give a 14 feet navigation from Georgian Bay down that river to Montreal, a scheme proposed many years ago and lately revived by private parties with considerable energy. The results of these surveys will be found in a special report from the engineer in charge, Mr. H. A. F. Macleod, attached as an appendix to the present volume.

His conclusions are that the canal can be constructed at an estimated cost, for a 14 feet navigation of $23,898,000, and for a 20 feet navigation of $72,627,000. The distance from Georgian Bay to Montreal is set down at 430 miles.

In the report of the Chief Engineer, and in the reports of the superintending engineers, will be found full details as to the operation of the various canals, and as

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If the number of new ships ordered for lake trade should be limited, the difference will probably be made up in steel freight steamers of about 3,000 tons capacity, to be built for both lake and Atlantic service—vessels suited to passage through the Canadian canals from the lakes to the sea board. The canal type of steamer is about 255 feet over all, 42 feet beam and 26 feet moulded depth. About a dozen such vessels are now in commission on the lakes, and they might be sent on to the seaboard for coast service at any time. The few that have gone to the Atlantic have proven so successful in the trade to Porto Rico and down the United States coast, that it is proposed to equip four others, now under construction at the works of the American Ship Building Company, for all kinds of service on salt water as well as on the lakes. Companies are forming for the construction and operation of a very large fleet of steamers of this kind, and it is expected that the lake builders will profit largely on this score.'

to the progress and position of the works of enlargement and construction now being carried on.

As being responsible for the efficient working of the department, and as very practically conscious of its needs and deficiencies, I desire to emphatically repeat here the observations with which I closed my last year's report :—

'In concluding this report, it is only proper that I should draw attention to the rapid growth of the country during the last few years ; specially in the enormous increase in the area of its development, and the interest of its business operations, which involve important questions, directly and indirectly affecting the great transportation problems with which this department is concerned, and which it is called upon to deal with authoritatively. With this rapid growth, the inner, or departmental staff proper, has not kept pace, and I must strongly urge the necessity, which is very apparent, of its amplification and its adjustment to the conditions of the times, if the wide and ever expanding field it is required to cover, is to be properly and comprehensively treated.

'In addition to the very voluminous correspondence with the general public, its necessary record and filing, the supervision of the expenditure entailed by the government railway and canal works in operation and under construction, and the revenue derivable from them, the leasing of lands and water powers, the settlement of claims, the letting of contracts, and the preparation of (often very extended) returns, giving information required by the House of Commons and the Senate, there is also the inspection of completed portions of subsidized railways, and of all railways before opened to traffic ; the inspection of railway bridge structures, with the examination of all their plans, required to be sent in for approval; inspection of railways subject to complaint of any kind; the examination for approval of railway by-laws, whether of tariff or otherwise, and the carrying out of varied and complicated duties entailed on the Railway Committee of the Privy Council; further, the compilation, analysis and printing of extensive statistics relating to all Canadian railways, and of similar statistics relating to the traffic on the canals of the Dominion. In justice to the work to be done and to those who are required to perform it, I am compelled to state that the staff is inadequate.'

I have the honour to be, sir.

Your obedient servant,

COLLINGWOOD SCHREIBER,

Deputy of the Minister of Railways and Canals.

PART I

SKETCH MAPS OF DOMINION RAILWAYS AND CANALS

ALSO INFORMATION AS TO

TRANSCONTINENTAL RAILWAY COMMUNICATION AND AS TO ROUTES OF CANAL NAVIGATION

AND

REPORT OF THE CHIEF ENGINEER

COMPRISING REPORTS OF

GENERAL MANAGER OF GOVERNMENT RAILWAYS AND SUPERINTENDENTS OF CANALS

ALSO

DECISIONS OF THE RAILWAY COMMITTEE OF THE PRIVY COUNCIL

CANADIAN TRANSCONTINENTAL RAILWAY COMMUNICATION.

HALIFAX, OR ST. JOHN, TO MONTREAL.

The routes available between Halifax and Montreal are four in number, in all of which the Intercolonial is used, either in whole or in part, as follows :—

Halifax to Montreal.

	Miles.
1. Intercolonial Railway, via Lévis, to Montreal	837
2. Intercolonial Railway to St. John	275
Canadian Pacific Railway, from St. John to Montreal	480
Total	755
3. Intercolonial Railway to St. John	275
Canadian Pacific Railway, from St. John to Vanceboro'	90
Maine Central Railway, from Vanceboro' to Danville Junction	224
Grand Trunk Railway, from Danville Junction to Montreal.	270
Total	859
4. Intercolonial Railway to St. John	275
Canadian Pacific Railway from St. John to Edmundston	170
Temiscouata Railway, from Edmundston to Rivière du Loup	81
Intercolonial Railway, from Rivière du Loup to Montreal	278
Total	804

St. John to Montreal.

	Miles.
1. Intercolonial Railway, via Lévis, to Montreal	740
2. Canadian Pacific Railway to Montreal	480
3. Canadian Pacific Railway to Edmundston	170
Temiscouata Railway, from Edmundston to Rivière du Loup	81
Intercolonial Railway, from Rivière du Loup to Montreal	278
Total	529

MONTREAL, OR QUEBEC, TO THE PACIFIC COAST.

Montreal to Vancouver.

	Miles.
1. Canadian Pacific Railway to Vancouver	2,906
2. Grand Trunk Railway to North Bay	560
Canadian Pacific Railway from North Bay to Vancouver.	2,542
Total	3,102

Quebec to Vancouver.

	Miles.
1. Canadian Pacific Railway to Vancouver	3,052
2. Grand Trunk Railway to Montreal	172
Canadian Pacific Railway from Montreal to Vancouver	2,906
Total	3,078
3. Grand Trunk Railway to North Bay	732
Canadian Pacific Railway from North Bay to Vancouver	2,542
Total	3,274

The Canadian Pacific Railway was opened for through traffic on June 28, 1886.

INTERCOLONIAL RAILWAY.

The Intercolonial Railway touches six Atlantic Ocean ports, namely, Point du Chene, Pictou, Halifax, St. John, Sydney and North Sydney, as well as the ports of Quebec and Montreal on the River St. Lawrence.

The total length of the road operated during the year ended June 30, 1901, was 1,301 miles, and for freight branches 27 miles, making a total of 1,328 miles.

The following are the through distances :—

	Miles.
Halifax to Montreal, via Lévis	837
St. John to Montreal, via Lévis	740
Sydney to Montreal, via Lévis	990
North Sydney to Montreal, via Lévis	983

Freight is carried direct via St. Henri to Montreal, which would reduce each of the above distances by 6 miles.

WINDSOR BRANCH.

This road extends from Windsor Junction, on the Intercolonial Railway, to Windsor, a distance of 32 miles.

PRINCE EDWARD ISLAND RAILWAY.

LENGTH OF LINE.

	Miles.
Souris to Tignish	168
Mount Stewart to Georgetown	24
Charlottetown to Royalty Junction	5
Emerald Junction to Cape Traverse	13
Alberton to Cascumpec wharf	1
Total	211

Communication between the Prince Edward Island Railway and the Intercolonial Railway is afforded in summer by steamer between Summerside and Point du Chene, between Charlottetown and Pictou and between Georgetown and Pictou, and in winter by specially built steamers between Georgetown and Pictou and between Charlottetown and Pictou. There is also further provision made for communication by ice boats between Cape Traverse on Prince Edward Island and Cape Tormentine on the mainland, a distance of about 9 miles, at which latter place connection is made with the New Brunswick and Prince Edward Railway about 40 miles in length, connecting with the Intercolonial Railway at Sackville. This winter service across the Straits of Northumberland is efficiently worked by the Marine and Fisheries Department.

CANALS.

The canal systems of the Dominion, under government control in connection with lakes and navigable rivers, are as follows :—

First.—The through route between Montreal and the head of Lake Superior (14 feet minimum depth of water.)

	Miles.
1. Lachine Canal	8½
Lake St. Louis and River St. Lawrence	16
2. Soulanges Canal	14
Lake St. Francis and River St. Lawrence	33
3. Cornwall Canal	11
River St. Lawrence	5

	Miles.
4. Farran's Point Canal	1
River St. Lawrence	10
5. Rapide Plat Canal	3½
River St. Lawrence	4
6. Galops Canal	7¼
River St. Lawrence and Lake Ontario	236
7. Welland Canal	26¾
Lake Erie, Detroit River, Lake St. Clair, Lake Huron, &c.	580
8. Sault Ste. Marie Canal	1¼
Lake Superior to Port Arthur	266
Total	1,223¼
To Duluth	1,357
Chicago	1,286

Second.—Ottawa to Lake Champlain.

1. Grenville, 2. Carillon, 3. St. Anne's, 4. Chambly, 5. St. Ours Canals.

Third.—Ottawa to Kingston and Perth.

1. Rideau Canal.

Fourth.—Lake Ontario at Trenton to Lake Huron at mouth of River Severn.

1. Trent Canal (not completed).

Fifth.—Ocean to the Bras d'Or Lakes.

1. St. Peter's Canal.

RIVER ST. LAWRENCE AND LAKES.

The River St. Lawrence, with the system of canals established on its course above Montreal, and the Lakes Ontario, Erie, St. Clair, Huron and Superior, with connecting canals, afford a course of water communication extending from the Straits of Belle Isle to Port Arthur, at the head of Lake Superior, a distance of 2,200 statute miles. The distance to Duluth is 2,343 miles. The distance to Chicago 2,272 miles.

From the Straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 986 miles. From Quebec to Montreal, the distance is 160 miles. Owing to the shallowness of the waters on a portion of the river between these two places, particularly through Lake St. Peter, vessels drawing more than from ten to twelve feet were formerly barred from passage for the greater part of the season of navigation. In 1826, the question of deepening the channel was first definitely mooted, but it was not until 1844 that any dredging operations were begun. In that year, the deepening of a new straight channel was commenced, but the scheme was abandoned in 1847. In 1851 the deepening of the present channel was begun. At that time the depth of the channel at low water was 10 feet 6 inches. By the year 1869 this depth had been increased to 20 feet, by 1882 to 25 feet, and by the close of 1888 the depth of 27½ feet, at low water, was attained for a distance of 108 miles from Montreal to a point within tidal influence. This work is now being continued by the government of Canada, which in 1888, under the provisions of the Act 51 Vic., ch. 5, of that year, assumed the indebtedness. The channel has a minimum width of 300 feet, extending to 550 feet at points of curvature. The channel is lighted and buoyed.

Navigation, which is closed by ice during the winter months, opens about the end of April.

Montreal has by this work been placed at the head of ocean navigation, and here the canal systems of the River St. Lawrence begin, overcoming the various rapids by which the river channel upwards is obstructed, and giving access through the St. Lawrence canals, the Welland canal, the great lakes and the Sault Ste. Marie canal, to the head of Lake Superior.

The difference in level between the point on the St. Lawrence, near Three Rivers, where tidal influence ceases, and Lake Superior, is about 600 feet.

The Dominion canals, constructed between Montreal and Lake Superior are the Lachine, Soulanges, Cornwall, Farran's Point, Rapide Plat, Galops, Murray, Welland and Sault Ste. Marie. Their aggregate length is 73 miles; total lockage (or height directly overcome by locks), 551 feet. The number of locks through which a vessel would pass in its passage from Montreal, at the head of ocean navigation, to the head of Lake Superior is 48. The Soulanges canal takes the place of the Beauharnois canal; the latter may be abandoned for navigation purposes.

Communication between Lakes Huron and Superior is obtained by means of the Canadian Sault Ste. Marie canal, and also by the St. Mary's Falls canal, situated on the United States side of the River St. Mary. Both these canals are free of toll.

It is important to note that the enlargement of the canals on the main route between Montreal and Lake Erie comprises locks of the following minimum dimensions: Length, 270 feet; width, 45 feet; depth of water on sills, 14 feet. The length of the vessels to be accommodated is limited to 255 feet. At Farran's, in the canal of that name, the lock is 800 feet long. A similar lock is built at Iroquois on the Galops canal, the object being to pass a full tow at one lockage.

LACHINE CANAL.

Length of canal	8½ statute miles.
Number of locks	5
Dimension of locks	270 feet by 45 feet.
Total rise or lockage	45 feet
Depth of water on sills. at two locks	18 "
Depth of water on sills. at three locks	14 "
Average width of new canal	150 "

The old lift locks, 200 feet by 45 feet, are still available, with 9 feet of water on mitre sills.

The canal consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two lock entrances at each end.

The canal extends from the city of Montreal to the town of Lachine, overcoming the St. Louis rapids, the first of the series of rapids which bars the ascent of the River St. Lawrence. They are 986 miles distant from the Straits of Belle Isle.

SOULANGES CANAL.

Length of canal	14 statute miles.
Number of locks { lift	4
guard	1
Dimensions of locks	280 feet by 45 feet.
Total rise or lockage	84 feet
Depth of water on sills	15 "
Breadth of canal at bottom	100 "
Breadth of canal at water surface	164 "
Number of arc lights	219 of 2,000 c. p. each

The canal extends from Cascade Point to Coteau Landing, overcoming the Cascade Rapids, Cedar Rapids and Coteau Rapids.

From the head of the Lachine to the foot of the Soulanges the distance is sixteen miles.

CORNWALL CANAL.

Length of canal	11 statute miles.
Number of locks	6
Dimensions of locks	270 feet by 45 feet.
Total rise or lockages	48 feet.
Depth of water on sills	14 "
Breadth of canal at bottom	100 "
Breadth of canal at water surface	164 "

The old lift locks, 200 feet by 45 feet, are also available, with nine feet of water on mitre sills.

From the head of the Soulanges to the foot of the Cornwall Canal there is a stretch through Lake St. Francis, of 32¾ miles, which is being made navigable for vessels drawing fourteen feet.

The Cornwall Canal extends past the Long Sault Rapids from the town of Cornwall to Dickenson's Landing.

WILLIAMSBURG CANALS.

The Farran's Point, Rapide Plat and Galops canals are collectively known as the Williamsburg Canals.

FARRAN'S POINT CANAL.

Length of canal	1 mile.
Number of locks	1
New lock	800 feet by 45 feet.
Old lock	200 “
Total rise or lockages	3½ feet
Depth of water on sills of new lock	14 “
Depth of water on sills of old lock	9 “
Breadth of canal at bottom	90 “
Breadth of canal at water surface	154 “

From the head of the Cornwall Canal to the foot of Farran's Point Canal, the distance on the River St. Lawrence is five miles. The latter canal enables vessels ascending the river to avoid Farran's Point Rapid, passing the full tow at one lockage. Descending vessels run the rapids with ease and safety.

RAPIDE PLAT CANAL.

Length of canal	3⅞ miles.
Number of locks	2
Dimensions of locks	270 feet by 45 feet.
Total rise or lockage	11½ “
Depth of water on sills	14 “
Breadth of canal at bottom	80 “
Breadth of canal at surface of water	152 “

The old lift lock, 200 feet by 45, is also available, with nine feet of water on mitre sills.

From the head of Farran's Point Canal to the foot of Rapide Plat Canal, there is a navigable stretch of 10½ miles. This canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

GALOPS CANAL.

Length of canal	7⅓ miles.
Number of locks	3
Dimensions of locks, one of which is	2-270 by 45.
“ a guard lock	1-800 by 45.
Total rise or lockage	15½ feet.
Depth of water on sills	14 “
Breadth of canal at bottom	80 “
Breadth of canal at surface of water	144 “

From the head of Rapide Plat Canal to Iroquois, at the foot of the Galops Canal, the St. Lawrence is navigable 4½ miles. This canal enables vessels to overcome the rapids at Pointe aux Iroquois, Point Cardinal and the Galops.

MURRAY CANAL.

Length between eastern and western pier heads	5⅛ miles.
Breadth at bottom	80 feet.
Breadth at water surface	120 "
Depth below lowest known lake level	11 "

No locks.

This canal extends through the Isthmus of Murray, giving connection westward between the head waters of the Bay of Quinté and Lake Ontario, and thus enabling vessels to avoid the open lake navigation.

WELLAND CANAL.

Main line from Port Dalhousie, Lake Ontario, to Port Colborne, Lake Erie.

		Old Line.	Enlarged or New Line.
Length of canal		27½ miles.	26¾ miles.
Pairs of guard-gates (formerly 3)			2
Number of locks	lift	26	25
	guard	1	1
Dimensions		1 lock 200 x 45 1 " 200 x 45 1 (tidal) 230 x 45 24 locks 150 x 45	270 feet x 45 feet.
Total rise or lockage		326¾ feet	326¾ feet
Depth of water on sills		10½ "	14 "

WELLAND RIVER BRANCHES.

Length of canal—	
Port Robinson Cut to River Welland	2,622 feet.
From the canal at Welland to the river, via lock at Aqueduct	300 "
Chippewa Cut to River Niagara	1,020 "
Number of locks—one at Aqueduct and one at Port Robinson	2
Dimensions of locks	150 by 26½ feet.
Total lockage from the canal at Welland down to River Welland	10 feet.
Depth of water on sills	9 feet 10 inches.

GRAND RIVER FEEDER.

Length of canal	21 miles
Number of locks	2
Dimensions of locks	1 of 150 by 26½ feet 1 of 200 by 45 "
Total rise or lockage	7 to 8 feet
Depth of water on sills	9 feet

PORT MAITLAND BRANCH.

Length of canal	1¾ miles.
Number of locks	1
Dimensions of locks	185 feet by 45 feet
Total rise or lockage	7½ feet
Depth of water on sills	11 "

The Welland canal has two entrances from Lake Ontario, at Port Dalhousie, one for the old, the other for the new canal.

From Port Dalhousie to Allanburgh, 11¾ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

From Allanburgh to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

From the head of the Welland canal there is a deep water navigation through Lake Erie, the Detroit river, Lake St. Clair, the St. Clair river, Lake Huron and River St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through Lake Superior to Port Arthur is 266 miles, and to Duluth 400 miles.

SAULT STE. MARIE CANAL.

Length of canal, between the extreme ends of the entrance piers	5,967 feet.
Number of locks	1
Dimensions of lock	900 ft. by 60 ft.
Depth of water on sills (at lowest known water level)	20 ft. 3 inches.
Total rise or lockage	18 feet.
Breadth of canal at bottom	141 ft. 8 inches.
Breadth at surface of water	150 feet.

This canal has been constructed through St. Mary's Island, on the north side of the rapids of the River St. Mary, and, with that river, gives communication on Canadian territory between Lakes Huron and Superior. The masonry pier of the bridge carrying the Canadian Pacific Railway over the canal, which stood in the channel of the canal, forming an obstruction to navigation, has been removed ; the swing now spanning the full width of the channel or prism of the canal.

MONTREAL, OTTAWA AND KINGSTON.

This route extends from the harbour of Montreal to the port of Kingston, passing through the Lachine Canal, the navigation section of the lower River Ottawa, and the Ottawa canals, to the city of Ottawa ; thence by the River Rideau and the Rideau canal to Kingston, on Lake Ontario—a total distance of 245¾ miles.

After leaving the Lachine canal the works constructed to overcome difficulties of navigation are :—

Ottawa River Canals.

The Ste. Anne's Lock.	Grenville Canal.
Carillon Canal.	Rideau Canal.

The total lockage (not including that of the Lachine canal) is 509 feet—(345 rise, 164 fall)—and the number of locks is 55.

The following table exhibits the intermediate distances from Montreal harbour :—

Sections of Navigation.	Intermediate Distance.	Total Distance from Montreal.
	Miles.	Miles.
The Lachine Canal	8½	
From Lachine to Ste. Anne's Lock	15	23
Ste. Anne's Lock and piers	⅛	23
Ste. Anne's Lock to Carillon Canal	27	50
The Carillon Canal	¾	51
From Carillon to Grenville Canal	6¼	57
The Grenville Canal	¾	63
From the Grenville Canal to entrance of Rideau navigation	56	119
Rideau navigation ending at Kingston	126¼	245

STE. ANNE'S LOCK.

	Old Lock.	New Lock.
Length of canal	⅛ mile	⅛ mile
Number of locks	1	1
Dimensions of locks	190 x 45 feet.	200 x 45 feet.
Total rise or lockage	3 feet	3 feet
Depth of water on sills	6 "	9 "

This work, with guide piers above and below, surmounts the Ste. Anne's rapids between Ile Perrot and the head of the Island of Montreal, at the outlet of that portion of the River Ottawa which forms the Lake of Two Mountains, 23½ miles from Montreal harbour.

THE CARILLON CANAL.

Length of canal	¾ mile
Number of locks	2
Dimensions of locks	200 x 45 feet
Total rise or lockage	16 feet
Depth of water on sills	9 "
Breadth of canal at bottom	100 "
Breadth of canal at water surface	110 "

This canal overcomes the Carillon rapids.

From Ste. Anne's lock to the foot of the Carillon canal there is a navigable stretch of 27 miles, through the Lake of Two Mountains and the River Ottawa.

By the construction of the Carillon dam across the River Ottawa the water at that point is raised 9 feet, enabling the river above to be used for navigation.

GRENVILLE CANAL.

Length of canal	5¾ miles
Number of locks	5
Dimensions of locks	200 x 45 feet.
Total rise or lockage	43¾ feet
Depth of water on sills	9 "
Breadth of canal at bottom	40 to 50 feet
Breadth of canal at surface of water	50 to 80 feet

This canal, by which the Long Sault Rapids are avoided, is about 56 miles below the city of Ottawa, up to which point the River Ottawa affords unimpeded navigation.

RIDEAU NAVIGATION.

The Rideau system connects the River Ottawa, at the city of Ottawa, with the eastern end of Lake Ontario, at Kingston.

Length of navigation waters	126¼ miles
Number of locks going from Ottawa to Kingston	35 ascending 14 descending
Total, lockage	446¼ feet { 282¼ rise and 164 fall } at high water
Dimensions of locks	134 x 33 feet
Depth of water on sills	5 feet
Navigation depth through the several reaches	4½ feet
Breadth of canal reaches at bottom	60 feet in earth 54 feet in rock
Breadth of canal at surface of water	80 feet in earth

PERTH BRANCH.

Length of canal	6 miles
Number of locks	2
Dimensions of locks	134 feet x 32 feet
Total rise or lockage	26 "
Depth of water on sills	5 " 6 inches.
Length of dam	200 "
Breadth of canal at bottom	40 "
Breadth of canal at surface of water	40 feet in rock 60 " in clay

The Perth branch of the Rideau canal affords communication between Beveridge's bay, on Lake Rideau, and the town of Perth.

The summit level of the Rideau system is at upper Lake Rideau, but several of the descending reaches are also supplied by waters which have been made tributary to them. The following description gives the sources of supply :—

From the summit, the route towards Ottawa follows the Rideau river, and that towards Kingston follows the River Cataraqui. The supply of water for the canal is derived from the reserves given in detail below.

These may be divided into three systems, viz. :—

1. The summit level, supplied by the Wolfe lake system.

2. The eastern descending level to Ottawa, supplied by the River Tay system, discharging into Lake Rideau.

3. The south-west descending level to Kingston, supplied by the Mud lake system, formerly known as the Devil lake system, discharging into Lake Openicon.

Lake Openicon receives the waters of Buck lake and Rock lake.

All these waters on the descending level, supplemented by those of Lake Loughboro', flow into Cranberry lake, which, discharging through Round Tail outlet, forms the River Cataraqui. The river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

RICHELIEU AND LAKE CHAMPLAIN.

This system, commencing at Sorel, at the confluence of the Rivers St. Lawrence and Richelieu, 46 miles below Montreal, extends along the River Richelieu, through the St. Ours lock to the basin of Chambly ; thence, by the Chambly canal, to St. Johns, and down the River Richelieu to Lake Champlain. The distance from Sorel to the boundary line is 81 miles.

At Whitehall, the southern end of Lake Champlain is entered, and connection is obtained with the River Hudson, by which the city of New York is directly reached. From the boundary line to New York the distance is 330 miles.

The following table shows the distances between Sorel and New York :—

Section of Navigation.	Intermediate Distance.	Total Distances.
	Miles.	Miles.
Sorel to St. Ours Lock	14	14
St. Ours Lock to Chambly Canal	32	46
Chambly Canal	12	58
Chambly Canal to boundary line	23	81
Boundary line to Champlain Canal	111	192
Champlain Canal to junction with Erie Canal	66	258
Erie Canal, from junction to Albany	7	265
Albany to New York	146	411

ST. OURS LOCK AND DAM.

Length	⅛	mile.
Number of locks	1	"
Dimensions of lock	200	feet by 45 feet.
Total rise or lockage	5	"
Depth of water on sills	7	feet at low water.
Length of dam in eastern channel	300	"
Length of dam in western channel	690	"

At St. Ours, 14 miles from Sorel, the River Richelieu, is divided by a small island into two channels. The St. Ours lock is in the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours lock and Chambly basin, a distance of 32 miles.

CHAMBLY CANAL.

Length of canal	12	miles	
Number of locks	9		
Dimensions of locks:—			
Guard Lock, No. 1 at St Johns	122	feet	From 22½ to 24 feet wide.
Lift " 2	124	"	
" " 3, 4, 5, 6	118	"	
" " 7,8,9 co'bined	125	"	
Total rise or lockage	74	"	
Depth of water on sills	7	"	
Breadth of canal at bottom	36	"	
Breadth of canal at surface of water	60	"	

This canal succeeds the 32 miles of navigable water between St. Ours lock and Chambly basin. The canal overcomes the rapids between Chambly and St. Johns.

TRENT CANAL.

The term 'Trent canal' is applied to a series of water stretches, which do not, however, form a connected system of navigation, and which in their present condition, are efficient only for local use. By various works, this local use has been extended, and by others, now in progress and contemplation, this will become a through route between Lake Ontario and Lake Huron.

The series is composed of a chain of lakes and rivers, extending from Trenton, at the mouth of the River Trent, on the Bay of Quinté, Lake Ontario to Lake Huron.

Many years ago the utilizing of these waters for the purpose of through water communication between Lake Huron and Lake Ontario was projected.

The course, as originally contemplated and modified, is as follows :—

Through the River Trent, Rice lake, the River Otonabee and Lakes Clear, Stony, Lovesick, Deer, Buckhorn, Chemong, Pigeon, Sturgeon and Cameron to Lake Balsam, the summit water, about 165 miles from Trenton ; from Lake Balsam by a canal and the River Talbot to Lake Simcoe ; thence by the River Severn to Georgian bay, Lake Huron ; the total distance being about 200 miles, of which only about 15 or 20 miles will be actual canal.

The full execution of the scheme, commenced by the Imperial government in 1837, was deferred. By certain works, however, below specified, sections of these waters have been made practicable for navigation, and the whole scheme is now being carried out. A branch of the main route, extending from Sturgeon lake south, affords communication with the town of Lindsay, and, through Lake Scugog to Port Perry, a distance of 190 miles from Trenton.

The following table gives the distance of navigable and unnavigable reaches :—

	Navigable Miles.	Unnavigable Miles.
From Trenton, Bay of Quinté to Nine Mile rapids.	—	9
Nine Mile rapids to Percy landing.... ..	19½	—
Percy landing to Heeley's Falls dam......	—	14½
Heeley's Falls dam to Peterborough	51¾	—
Peterborough to Lakefield	—	9
Lakefield to a point across Balsam lake	61	—
	132¼	32¾

Total distance, Bay of Quinté to a point across Balsam lake..	165
From Sturgeon Point on Sturgeon lake, 48¾ miles from Lakefield, the branch through the town of Lindsay to Port Perry at the head of Lake Scugog................	27

The works by which the Trent navigation has been improved comprise canals, with locks and bridges, at Young Point, Burleigh Rapids, Lovesick, Buckhorn Rapids, Bobcaygeon, Fenelon Falls and Rosedale ; also dams at Lakefield, Young's Point, Burleigh Falls, Lovesick, Buckhorn, Bobcaygeon and Fenelon Falls. By these works there is afforded communication between Lakefield, 9½ miles from Peterborough, and Balsam lake, the headwaters of the system ; opening up a total of about 160 miles of direct and lateral navigation.

At Lakefield, 9½ miles from Peterborough, the dam at the head of the Nine Mile rapids of the River Otonabee, maintains navigation on Lake Katchewannoe up to Young's Point.

At Young's Point, 5 miles from Lakefield, the dam between Lake Katchewannoe and Clear lake controls the water level through Clear and Stony lakes up to the foot of the Burleigh canal. The lock here, it should be observed, is controlled by the Provincial government.

At Burleigh Rapids, 10 miles from Young's Point, a canal, about 2¼ miles in length, passes the Burleigh and Lovesick Rapids, and gives communication between Stony lake and Deer bay.

At Buckhorn Rapids, 7 miles from Burleigh Rapids, there is a canal about one-fourth of a mile long.

At Bobcaygeon, 15¾ miles from Buckhorn Rapids, a dam, 553 feet long, controls the water level up to Fenelon Falls.

At Fenelon Falls, 15 miles from Bobcaygeon, a canal about one-third of a mile in length connects Sturgeon lake with Cameron lake.

The following is a list of the locks, with their dimensions:—

1	Lock at	Rosedale (maintained by the Ontario government)	100′ x 30′ x 4′ 6′ to 6′ 6″	depth water on mitre sill.
2	Locks at	Fenelon	134′ x 33′ x 5′ 0″ to 7′ 6″	depth water on mitre sill.
1	“	Lindsay	134′ x 33′ x 5′ 0″ to 7′ 0″	“ “
1	“	Bobcaygeon	134′ x 33′ x 5′ 8″ to 7′ 6″	“ “
1	“	Buckhorn	134′ x 33′ x 5′ 0″ to 9′ 0″	“ “
1	“	Lovesick	134′ x 33′ x 5′ 0″ to 9′ 4″	“ “
2	“	Burleigh	134′ x 33′ x 6′ 0″ to 8′ 0″	“ “
1	“	Young's Point (a Provincial government work)	134′ x 33′ x 5′ 0″ to 14′ 0″	depth water on mitre sill.
1	“	Peterborough	134′ x 33′ x 5′ 0″ to 10′ 0″	depth water on mitre sill
1	“	Hastings	134′ x 33′ x 7′ 0″ to 10′ 6″	“ “
1	“	Chisholms	134′ x 33′ x 5′ 0″ to 8′ 6″	“ “
13				

ST. PETER'S CANAL, CAPE BRETON.

Length of canal	About 2,400 feet.
Breadth at water line	55 feet.
Lock	One tidal lock, 4 pairs of gates.
Dimensions	200 feet by 48 feet.
Depth of water on sills	18 “ at lowest water.
Depth through canal	19 “
Extreme rise and fall of tide in St. Peters' Bay	4 “

This canal connects St. Peter's bay, on the southern side of Cape Breton, Nova Scotia, with the Bras d'Or lakes. It crosses an isthmus half a mile in width, and gives access from the Atlantic.

BEAUHARNOIS CANAL.

Length of canal	12 statute miles.
Number of locks	9
Dimensions of locks	200 feet by 45 feet.
Total rise or lockage	82½ “
Depth of water on sills	9 “
Breadth of canal at bottom	80 “
Breadth of canal at water surface	120 “

As the new Soulanges canal is now opened for navigation, it is to be presumed that the Beauharnois canal will be abandoned for navigation purposes.

CHIEF ENGINEER'S REPORT

DEPARTMENT OF RAILWAYS AND CANALS,
OFFICE OF THE CHIEF ENGINEER,
OTTAWA, December 15, 1901.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1901, covering, however, works of construction up to October 1, 1901. Accompanying it are the following :—

First.—The annual report of the General Manager of Government Railways. attached to which are the reports of the General Superintending Engineer of Maintenance, the Chief Engineer and Mechanical Superintendent of the Intercolonial Division, and the report of the Superintendent of the Prince Edward Island Division, with statements of accounts prepared by the Accountants of these roads. (Part I.)

Second.—Report of Mr. J. S. O'Dwyer, one of the engineers on the exploratory surveys to ascertain the most practicable route for an all Canadian railway from some point on an existing railway into the Yukon district, also between the Stikine river and an ocean port in British Columbia. (Part I.)

Third.—The annual reports of the Superintending Engineers and Superintendents of the several canals. (Part I.)

Fourth.—Proceedings before the Railway Committee of the Privy Council. (Part I.)

Fifth.—Financial statements of the Accountant of the Department. (Part II.)

Sixth.—A statement of the condition of the subsidies granted in aid of the construction of railways ; also a list of Railway Subsidy Acts. (Part III.)

Seventh.—Statement of contracts entered into during the year, prepared by Mr. Ruel, the law clerk. (Part IV.)

Eighth.—Statement of water powers and other public property leased by the department during the year, prepared by Mr. Ruel. (Part IV.)

Ninth.—Statement of property purchased or damaged during the year, prepared by Mr. Ruel. (Part IV.)

Tenth.—Agreements respecting subsidies in aid of construction of railways entered into during the year, prepared by Mr. Ruel. (Part IV.)

Eleventh.—The canal statistics for the season of navigation of 1900, compiled by Mr. Devlin. (Part V.)

Twelfth.—The Steam and Electric railway statistics for the year ended June 30, 1901, compiled by Mr. Ridout, from returns by the railway companies. (Part VI.)

The following shows the length of the government railways in operation on June 30, 1901:—

INTERCOLONIAL RAILWAY.

MAIN LINE AND BRANCHES.

	Miles.
Montreal to Halifax, via Lévis	837
Moncton to St. John	89
Truro to Sydney	213
Oxford Junction to Pictou	69
St. Charles Junction to Chaudière Curve, via St. Henri	17
Dalhousie Junction to Dalhousie	7
Derby Junction to Indiantown	14
Painsec Junction to Point du Chene	12
Pugwash Junction to Pugwash	5
Stellarton Junction to Brown's Point	12
North Sydney Junction to North Sydney	5
New Glasgow to Pictou Landing	8
Dartmouth Branch	13
	1,301

FREIGHT BRANCHES.

		Miles.	
Nicolet Branch		14·76	
Rivière du Loup Wharf Branch		4	
Rimouski	“	2	
Newcastle	“	2	
Dorchester	“	1	
Courtney Bay	“	1	
Sackville	“	·50	
Stewiacke	“	1	
Halifax Cotton Factory Branch		1	
			27·26
Total			1,328·26

WINDSOR BRANCH.

Windsor Junction to Windsor	32

PRINCE EDWARD ISLAND RAILWAY.

Souris to Tignish	168	
Mount Stewart to Georgetown	24	
Charlottetown to Royalty Junction	5	
Emerald Junction to Cape Traverse	13	
Alberton to Cascumpec Wharf	1	
		211
Total length of government railways		1,571·26

The result of the year's operations of the government railways may be stated as follows :—

Name of Railway.	Mileage in Operation.	Amount.		Profit.	Loss.
			$ cts.	$ cts.	$ cts.
Intercolonial Division	1,301	Working expenses	5,320,422 64		
		Earnings	4,972,235 87	Nil.	348,186 77
Windsor Branch	32	One-third earnings	47,261 89		
		Maintenance	16,862 66	30,399 23	
Prince Edward Island Division	211	Working expenses	261,766 24		
		Earnings	193,883 48	Nil.	67,882 76
Total miles	1,544			30,399 23	416,069 53
		Deduct profit from loss			30,399 23
		Net loss			385,670 30

The maintenance of the roads and rolling stock has received careful attention, and both roads continue to be in efficient condition, and the rolling stock is being brought up to the modern standard.

The working expenses of the Intercolonial Railway given above do not include the $140,000 rental paid to the Grand Trunk Railway, as interest on capital has never been considered in making comparisons from year to year ; if the $140,000 was added to the loss of $348,186.77, it would make the loss on the Intercolonial Railway $488,186.77, and on the whole of the government railways, $525,670.30.

The gross earnings of the government railways for the last two years compare as follows :—

	1899-1900.	1900-1901.
Intercolonial Division	$4,552,071 71	$4,927,235 87
Windsor Branch	47,351 43	47,261 89
Prince Edward Island Division	174,738 73	193,883 48
	$4,774,161 87	$5,213,381 24

Showing an increase in the gross earnings of $439,219.37.

The gross working expenses of the government railways for the last two years compare as follows :—

	1899-1900.	1900-1901.
Intercolonial Division	$4,431,404 69	$5,460,422 64
Windsor Branch	12,891 56	16,862 66
Prince Edward Island Division	220,931 81	261,766 24
Total	$4,665,228 06	$5,739,051 54

Gross working expenses of government railways	$5,739,051 54
Gross earnings of government railways	5,213,381 24
Excess of working expenses, including rental $140,000), over earnings	$ 525,670 30

Showing an increase in working expenses for the year, compared with the previous year, of $1,073,823.48, which is made up of the following :—

——	1899-1900.	1900-1901.	Difference.	
			Increase.	Decrease.
	$ cts.	$ cts.	$ cts.	$ cts.
Locomotive power	1,457,956 08	2,044,801 60	586,845 52	Nil.
Car expenses	1,049,809 96	1,177,127 98	127,318 02	Nil.
Maintenance of way and works	1,041,071 06	1,264,339 56	223,268 50	Nil.
Station expenses	569,634 29	664,154 41	94,520 12	Nil.
General charges	321,038 95	384,760 57	63,721 62	Nil.
Car mileage	61,023 25	63,867 42	2,844 17	Nil.
Rental of leased lines	164,694 47	140,000 00	Nil.	24,694 47
	4.665,228 06	5,739,051 54	1,098,517 95	24,694 47
Deduct decrease			24,694 47	
Net increase			1,073,823 48	

INTERCOLONIAL DIVISION.

The ocean passenger and freight traffic via the port of Halifax shows a considerable decrease for the winter season of 1900-01, as compared with the previous winter season.

COMPARATIVE Statement of Ocean-borne Passenger Business done at the Port of Halifax during the Winter Seasons of 1899-1900 and 1900-1901.

Name of Steamer.	1899-1900.			Name of Steamer.	1900-1901.		
	No. of Passengers.				No. of Passengers.		
	1st Class.	2nd Class.	Total.		1st Class.	2nd Class.	Total.
Vancouver	78	392	470	Vancouver	Nil.	1	1
Parisian	91	1,035	1,126	Parisian	5	9	14
Cambroman	56	531	587	Idaho	1	84	85
Lake Huron	12	328	340	Corinthian	2	39	41
Carthagenian	9	144	153	Carthagenian	Nil.	22	22
Monterey	3	19	22	Lake Champlain	26	155	181
Monteagle	3	Nil.	3	Degania	3	1	4
Siberian	5	120	125	Montford	Nil.	23	23
Californian	41	289	330	State of Nebraska	Nil.	6	6
Numidian	34	318	352	Numidian	2	11	13
Montrose	1	10	11	Wassan	Nil.	84	84
Lake Ontario	19	349	368	Lake Ontario	14	129	143
Dominion	113	500	613	Laurentian	2	46	48
Ashantee	3	Nil.	3	Sicilian	1	100	101
Arawa	3	46	49	Armenian	Nil.	1	1
Corean	11	68	79	Corean	Nil.	4	4
Assyrian	8	58	66	Assyrian	Nil.	1	1
Lake Superior	6	215	221	Lake Superior	7	39	46
Sardinian	1	46	47	Lake Megantic	4	159	163
Etolia	1	1	2	Lusitania	4	110	114
Lake Megantic	5	96	101	Tunisian	10	35	45
Norwegian	Nil.	54	54				
Yola	1	11	12				
Lusitania	4	173	177				
Tunisian	Nil.	446	446				
Arcadia	70	904	974				
Adria	Nil.	1,701	1,701				
Hispania	Nil.	389	389				
Total	577	8,243	8,820	Total	81	1,091	1,172

Of ocean-borne passengers in 1899-1900, 7,537 travelled via St. John by the Canadian Pacific Railway, and 824 travelled via Chaudière, by the Grand Trunk Railway.

Of ocean-borne passengers in 1900-1901, 100 travelled by the Canadian Pacific Railway, 264 travelled by the Grand Trunk Railway and 808 travelled by the Intercolonial Railway to Montreal.

COMPARATIVE STATEMENT of Ocean-borne Freight Traffic during the Winter Seasons of 1899-1900 and 1900-1901.

Name of Line of Steamers.	Winter of 1899-1900.			Name of Line of Steamers.	Winter of 1900-01.		
	Measurement tons.	Weight tons.	Total tons.		Measurement tons.	Weight tons.	Total tons.
Allan Line........	2,615	2,756	5,371	Allan Line	5,660	4,202	9,862
Furness Line.....	1,831	5,165	6,996	Furness Line	6,656	5,406	12,062
Elder-Dempster....	233	213	446	Elder-Dempster....	467	312	779
Pickford and Black	Nil.	Nil.	Nil.	Pickford and Black	339	564	903
Total	4,679	8,134	12,813	Total........	13,122	10,484	23,606

The above statement shows an increase of 10,793 tons of ocean-borne freight traffic for the winter season of 1900-1901, as compared with the winter season of 1899-1900.

The following is a statement of the quantity and classes of the rolling stock purchased on capital account up to June 30, 1901 :—

—	Engines.	Dining cars.	Passenger car Stock.					Conductors' Van.	Box, cattle and Refrigerator cars.	Platform cars.	Coal cars of 3 several kinds.	Snow ploughs.	Wing ploughs.	Flangers.	Rotary snow ploughs.	Auxiliary cars.
			1st class sleeping and parlour.	1st class.	2nd class sleepers.	2nd class.	Baggage and mail postal.									
	....	...	....	....	....	....	....	....	3,884	....	999	....	....	....	.. ..	..
	248	4	23	108	19	93	45	99	103	2521	152	49	10	22	2	9
	....	....	5	.....	....	....	28	....	84	....	624	....	....	....	......	....
Total	248	4	28	108	19	93	73	99	4,071	2521	1775	49	10	22	2	9

NOTE.—77 Gondola cars transferred to platform cars, 123 large coal cars transferred to platform cars.

The following is a statement of the quantity and classes of rolling stocks which have been built during the year ended June 30, 1901, at the cost of revenue to maintain the work :—

—	Engines.	Passenger Car Stock.					Conductor's Van.	Auxiliary Cars.	Box and Cattle Cars.	Platform Cars.	Coal Cars of three several kinds.	Snow Ploughs.	Wing Ploughs.	Flangers.	Rotary Snow Ploughs.
		1st Class Sleeping and Parlour.	1st Class.	2nd Class Sleepers.	2nd Class.	Baggage and Mail.									
Total...........	6	....	....	....	....	....	....	1	1	15	206	1	....	....	....

The following table shows the working expenses, gross earnings, the tonnage of freight and number of passengers carried each year since July 1, 1876, when the road was first opened as a through line to the west :—

Year.	Average Miles in Operation.	Working Expenses.	Gross Earnings.	Profit.	Loss.	Tons of Freight carried.	No. of Passengers carried.
		$ cts.	$ cts.	$ cts.	$ cts.		
1876-77........	714	1,661,673 55	1,154,445 33	....	507,228 22	421,327	613,420
1877-78.......	714	1,816,273 56	1,378,946 78	....	432,326 78	522,710	618,957
1878-79....	714	2,010,183 22	1,294,009 69	....	716,083 53	510,861	640,101
1879-80........	829	1,603,429 71	1,506,298 48	....	97,131 23	561,924	581,483
1880-81.......	840	1,759,851 27	1,760,393 92	542 65	....	725,777	631,245
1881-82........	840	2,069,657 48	2,079,262 66	9,605 18	....	838,956	779,994
1882-83........	840	2,360,373 27	2,370,910 10	10,547 83	....	970,961	878,600
1883-84........	887	2,377,433 62	2,384,414 92	6,981 30	....	1,009,237	944,636
1884-85.......	941	2,519,751 56	2,441,203 66	....	78,547 90	989,936	957,228
1885-86	946	2,583,999 67	2,450,093 88	....	133,905 79	1,023,788	932,880
1886-87.. .	966	2,922,369 62	2,660,116 93	... .	262,252 69	1,143,020	942,784
1887-88.......	971	3,366,781 74	2,983,336 05	....	383,445 69	1,288,823	1,040,163
1888-89..	971	3,244,647 73	2,967,801 00	... .	276,846 73	1,218,877	1,136,272
1889-90........	971	3,560,575 74	3,012,739 87	....	547,835 87	1,368,819	1,219,233
1890-91........	1,094	3,662,341 94	2,977,395 38	.. ..	684,946 56	1,304,534	1,298,304
1891-92........	1,142	3,439,377 00	2,945,441 97	. ...	493,935 03	1,264,575	1.297,732
1892-93........	1,142	3,045,317 50	3,065,499 09	20,181 59	....	1,388,080	1,292,878
1893-94	1,142	2,981,671 98	2,987,510 27	5,838 29	....	1,342,710	1,301,062
1894-95	1,142	2,936,902 74	2,940,717 95	3,815 21	....	1,267,816	1,352,667
1895-96	1,142	3,012,827 62	2,957,640 10	....	55,187 52	1,379,618	1,471,866
1896-97........	1,145	2,925,968 67	2,866,028 02	. ...	59,940 65	1,296,028	1,501,690
1897-98..	1,201	3,327,648 51	3 117,669 85	....	209,978 66	1,434,576	1,523,444
*1898-99	1,301	3,675,686 21	3,738,331 44	62,645 43	....	1,750,761	1,603,095
*1899-1900.....	1,301	4,431,404 69	4,552,071 71	120,667 02	... .	2,151,208	1,791,754
1900-01........	1,301	5,460,422 64	4,972,235 87	....	488,186 77	2,111,310	2,025,295

*** The working expenses include the rental paid for leased lines.**

The following table shows the number of tons of coal carried over the Intercolonial Railway from the Nova Scotia collieries to Ste. Rosalie, Chaudière Junction and St. John for points west thereof, and to local stations in each year since the road was opened as a through line :—

Year.	For the West.			To Local Stations.	Total.
	Via Ste. Rosalie.	Via Chaudière.	Via St. John.		
1876-77	....	....	....	103,420	103,420
1877-78	....	....	....	97,043	97,043
1878-79	....	300	....	112,232	112,532
1879-80	....	1,097	....	135,369	136,466
1880-81	....	6,102	4,022	174,483	184,607
1881-82	....	18,015	11,779	218,364	248,158
1882-83	....	12,837	22,206	227,380	262,423
1883-84	....	22,014	19,534	252,014	293,562
1884-85	....	133,440	1,773	213,791	349,004
1885-86	....	171,170	21,150	215,272	407,592
1886-87	....	192,871	27,536	233,178	453,585
1887-88	....	183,704	36,228	309,727	529,659
1888-89	....	160,026	27,923	338,538	526,487
1889-90	....	164,453	25,126	366,967	556,546
1890-91	....	113,996	39,213	344,829	498,038
1891-92	....	35,447	5,918	392,441	433,806
1892-93	....	136,868	3,775	402,653	543,296
1893-94	....	102,273	8,028	367,390	478,691
1894-95	....	67,082	7,865	310,253	385,200
1895-96	....	53,124	9,681	369,708	432,513
1896-97	....	38,395	12,305	331,469	382,172
1897-98	....	9,084	9,796	351,069	369,949
1898-99	....	4,644	5 399	484,163	494,206
1899-1900	....	3,495	Nil.	599,714	603,289
1900-01	136	Nil.	Nil.	506,454	506,590

It thus appears that the largest tonnage of coal carried over the road for the west was in the year 1886-87, when it reached 220,407 tons, since which the through coal traffic for points west of the Intercolonial Railway has greatly declined.

Table showing the number of bushels of grain carried during each year for shipment at Halifax since the road was opened as a through line to the west.

Year.	Bushels.		Total.	Year.	Bushels.		Total.
	Via Chaudière.	Via St. John.			Via Chaudière.	Via St. John.	
1876-77	....	....	....	1889-90	502,012	....	502,012
1877-78	....	....	....	1890-91	148,803	59,534	218,337
1878-79	....	....	....	1891-92	745,997	519,500	1,265,497
1879-80	....	....	....	1892-93	155,306	197,669	352,975
1880-81	....	....	....	1893-94	Nil.	8,026	8,026
1881-82	....	....	....	1894-95	Nil.	Nil.	Nil.
1882-83	31,011	....	31,011	1895-96	Nil.	Nil.	Nil.
1883-84	73,389	....	73,389	1896-97	Nil.	Nil.	Nil.
1884-85	300,901	....	300,901	1897-98	8,000	Nil.	8,000
1885-86	389,122	....	389,122	1898-99	30,000	Nil.	30,000
1886-87	575,880	....	575,880	1899-1900	13,239	Nil.	13,239
1887-88	69,021	....	69,021	1900-1901	147	Nil.	147
1888-89	129,725	....	129,725				

TABLE showing the number of barrles of flour carried during each year since the road was first opened as a through line to the west.

Year.	Barrels.	Year.	Barrels.
1876-77	254,710	1889-90	1,116,050
1877-78	657,778	1890-91	1,013,129
1878-79	630,329	1891-92	954,015
1879-80	533,248	1892-93	856,913
1880-81	672,310	1893-94	944,967
1881-82	692,095	1894-95	938,351
1882-83	983,916	1895-96	822,097
1883-84	817,134	1896-97	847,701
1884-85	935,977	1897-98	987,408
1885-86	761,127	1898-99	1,157,250
1886-87	763,894	1899-1900	1,234,076
1887-88	871,838	1900-1901	1,292,106
1888-89	948,514		

TABLE showing the number of bushels of grain carried during each year since the road was first opened as a through line to the west.

Year.	Bushels.	Year.	Bushels.
1876-77	292,852	1889-90	2,610,202
1877-78	331,170	1890-91	2,890,921
1878-79	302,921	1891-92	3,776,677
1879-80	534,021	1892-93	1,514,619
1880-81	565,678	1893-94	1,304,684
1881-82	560,253	1894-95	1,036,384
1882-83	1,195,601	1895-96	1,064,385
1883-84	654,673	1896-97	1,093,499
1884-85	734,902	1897-98	1,551,372
1885-86	849,800	1898-99	2,595,353
1886-87	1,018,395	1899-1900	2,720,453
1887-88	1,219,035	1900-1901	3,535,364
1888-89	1,526,158		

TABLE showing the quantity of lumber in feet carried during each year over the road since it was first opened for traffic as a through line to the west.

Year.	Feet.	Year.	Feet.
1876-77	58,096,474	1889-90	210,886,071
1877-78	56,626,547	1890-91	184,188,324
1878-79	55,626,696	1891-92	175,474,340
1879-80	55,462,654	1892-93	181,211,013
1880-81	72,841,388	1893-94	200,507,949
1881-82	78,356,418	1894-95	202,247,269
1882-83	104,633,417	1895-96	226,332,715
1883-84	131,120,948	1896-97	243,355,725
1884-85	138,493,675	1897-98	354,093,816
1885-86	117,186,512	1898-99	306,554,031
1886-87	161,801,763	1899-1900	379,350,074
1887-88	197,755,272	1900-1901	396,858,964
1888-89	199,507,777		

TABLE showing the number of live stock carried during each year over the road since it was first opened for traffic as a through line to the west.

Year.	Number.	Year.	Number.
1876-77	34,414	1889-90	86,771
1877-78	46,498	1890-91	95,529
1878-79	47,584	1891-92	87,889
1879-80	70,990	1892-93	93,369
1880-81	61,574	1893-94	79,203
1881-82	73,479	1894-95	72,106
1882-83	68,338	1895-96	64,051
1883-84	60,090	1896-97	72,082
1884-85	70,785	1897-98	89,301
1885-86	74,498	1898-99	109,821
1886-87	82,896	1899-1900	92,813
1887-88	98,302	1900-01	95.923
1888-89	85,960		

TABLE showing the number of tons of ocean-borne goods to and from Europe, via the port of Halifax, carried over the road during each year since it was first opened for traffic as a through line.

Year.	Via Ste. Rosalie and from the West.	Via Chaudière to and from the West.	Via St. John to and from the West.	To and from local Stations.	Total.
		Tons.	Tons.	Tons.	Tons.
1876-77					
1877-78		14,949		3,405	18,354
1878-79		21,628		2,643	24,271
1879-80		21,073		4,952	26,025
1880-81		15,454		3,334	18,788
1881-82		21,607		4,168	25,775
1882-83		24,875		7,911	32,786
1883-84		19,696		6,533	26,229
1884-85		22,787		8,405	31,192
1885-86		13,464		8,216	21,680
1886-87		16,923		9,811	26,734
1887-88		41,864		8,878	50,742
1888-89		17,340		11,481	28,821
1889-90		9,895		11,730	21,625
1890-91		9,923		10,764	20,687
1891-92		9,719	17	23,825	33,571
1892-93		7,295	100	12,319	19,714
1893-94		3,023	204	13,455	16,682
1894-95		6,749	213	10,399	17,361
1895-96		3,767	314	16,748	20,829
1896-97		2,654	263	17,239	20,156
1897-98		5,950	1,637	18,633	26,220
1898-99		2,465	243	31,555	34,263
1899-1900		2,379	307	37,108	39,794
1900-1901	322	6.860	1,142	155,514	163,838

Table showing the number of tons of raw and refined sugar carried over the road during each year since it was first opened as a through line.

Year.	Raw Sugar.				Refined Sugar.				
	To Chaudière for the West.	To St. John for the West.	To Local Stations.	Total.	To Ste-Rosalie for the West.	To Chaudière for the West.	To St. John for the West.	To Local Stations.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1876-77..	340	....	....	340	....	....	....	....	....
1877-78..	186	....	....	186	....	....	....	....	....
1878-79..	1,041	....	....	1,041	....	....	....	....	....
1879-80 .	12,220	....	....	12,220	....	....	....	....	....
1880-81..	13,872	....	....	13,872	....	4,022	....	2,902	6,924
1881-82..	14,256	....	1,290	15,546	....	7,146	....	3,607	10,753
1882-83..	9,465	....	508	9,973	....	11,126	....	5,497	16,623
1883-84..	13,778	....	3,068	16,846	....	14,543	....	7,265	21,808
1884-85..	10,381	....	3,661	14,042	....	18,024	....	8,445	26,469
1885-86..	4,394	....	3,998	8,392	....	7,660	....	5,858	13,518
1886-87..	20,450	....	8,500	28,950	....	15,044	....	8,395*	23,439
1887-88..	14,320	....	14,085	28,405	....	21,641	....	7,133	28,774
1888-89..	24,358	....	7,160	31,518	....	12,955	....	11,120	24,075
1889-90..	7,390	....	8,913	16,303	....	6,778	....	6,125	12,903
1890-91..	5,088	1,670	8,215	17,973	....	10,130	468	5,996	16,594
1891-92..	7,142	3,960	10,535	21,637	....	12,633	7,674	12,414	32,721
1892-93..	Nil.	Nil.	10,137	10,137	....	8,327	6,456	7,840	22,623
1893-94..	Nil.	Nil.	6,775	6,775	....	17,729	6,967	8,885	33,581
1894-95..	Nil.	Nil.	10,342	10,342	....	13,351	15,819	4,695	33,865
1895-96..	Nil.	Nil.	9,824	9,824	....	15,138	13,734	11,309	40,181
1896-97..	Nil.	Nil.	4,925	4,925	....	5,694	8,069	6,957	20,720
1897-98..	Nil.	Nil.	Nil.	Nil.	....	6,624	8,821	10,989	26,534
1898-99..	Nil.	Nil.	Nil.	Nil.	....	8,138	2,193	15,833	26,164
1899-1900	96	Nil.	Nil.	96	....	9,795	257	19,655	29,907
1900-01..	489	Nil.	Nil.	489	403	14,791	12	10,615	25,821

Table showing the number of tons of fresh and salt fish carried over the road during each year since it was opened as a through line.

Year.	Fresh Fish.					Salt Fish.				
	To Ste Rosalie for the West.	To Chaudière for the West.	To St. John for the West.	To local Stations.	Total.	To Ste. Rosalie.	To Chaudière for the West.	To St. John for the West.	To local Stations.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons
1876-77........	....	530	921	527	1,978	....	551	1,848	802	3,201
1877-78........	....	596	1,015	474	2,085	....	898	1,644	805	3,347
1878-79........	....	471	1,336	817	2,624	....	988	1,038	1,048	2,974
1879-80........	....	519	1,362	453	2,334	....	1,612	2,238	959	4,809
1880-81........	....	498	1,879	920	3,297	....	2,418	937	1,051	4,406
1881-82........	....	475	1,619	957	3,051	....	4,031	1,066	2,487	7,584
1882-83....	....	542	384	393	1,319	....	3,299	759	1,354	5,412
1883-84........	....	838	1,682	412	2,932	....	1,322	1,143	1,224	3,689
1884-85........	....	1,062	1,885	484	3,431	....	3,563	3,600	1,596	8,759
1885-86........	....	1,669	1,645	902	4,216	....	1,680	2,047	3,376	7,103
1886-87........	....	1,278	1,572	2,008	4,858	....	3,236	569	1,747	5,552
1887-88........	....	1,533	1,477	1,031	4,041	....	2,617	476	1,099	4,193
1888-89........	....	2,474	2,000	1,870	6,344	....	3,070	7,746	2,994	13,810
1889-90........	....	2,235	1,787	2,111	6,223	....	2,449	847	3,288	6,584
1890-91........	....	2,029	2,788	1,848	6,665	....	1,953	1,917	3,236	7,106
1891-92........	....	1,367	1,746	547	3,660	....	1,946	928	1,889	4,763
1892-93........	....	1,683	1,875	3,340	6,898	....	3,262	1,811	2,176	7,249
1893-94........	....	1,959	2,192	2,224	6,375	....	2,921	1,814	2,962	7,697
1894-95........	....	2,006	3,726	1,160	6,892	....	2,075	1,849	5,285	10,209
1895-96........	....	1,966	3,059	1,319	6,344	....	1,863	1,087	2,791	5,741
1896-97........	....	3,307	3,115	1,286	7,708	....	2,168	1,176	2,536	5,880
1897-98........	....	3,575	3,703	1,052	8,330	....	1,729	1,066	2,210	5,005
1898-99	....	1,210	2,070	3,305	6,583	....	1,651	1,198	3,625	5,474
1899-1900	....	2,547	2,706	3,686	8,939	....	2,421	1,563	2,659	6,643
1900-01........	37	2,009	3,207	4,125	9,393	360	3,419	1,346	4,643	9,768

Forty-three miles of the 67 lb. and 123 miles of the 56 lb. steel rails have been lifted and replaced by 80 lb. steel rails, and 495,293 ties have been renewed.

CAPITAL ACCOUNT.

Total cost of road and equipment up to June 30, 1901 :—

Road, including $1,459,000 paid on account purchasing Drummond County Railway	$52,865,651 78
Rolling stock	10,774,376 97
Total	$63,640,028 75

The increased accommodation at the deep water terminus at Halifax has been further improved.

Additions have been made to the rolling stock, and both the road and rolling stock have been efficiently maintained during the year, and by the introduction of more powerful locomotives and cars of increased carrying capacity the efficiency of the rolling stock has been greatly improved.

WINDSOR BRANCH.

This road continues to be operated by the Dominion Atlantic Railway Company, formerly the Windsor and Annapolis Railway Company, the company receiving two-thirds of the gross earnings for working the traffic, and the government one-third of the gross earnings for maintaining the way and works.

This road has been maintained in efficient condition.

TABLE showing the earnings and its division between the Windsor Branch and the Main Line of the Intercolonial Railway between Windsor and Halifax, the maintenance, expenses and net earnings of the Windsor Branch for each year since 1880.

Year.	Miles in operation.	One-third gross earnings.	Proportion of one-third gross earnings credited to line Windsor Junction to Halifax.	Proportion of one-third gross earnings credited to the Windsor Branch.	Maintenance expenses.	Profit.	Loss.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1880-81..	32	28,434 29	7,217 76	21,216 53	20,502 26	714 27	....
1881-82..	32	28,461 07	7,407 88	21,053 19	13,099 55	7,953 64	....
1882-83..	32	31,199 77	8,085 88	24,113 89	23,103 93	1,009 96	....
1883-84..	32	30,428 39	7,409 46	23,018 93	22,140 86	878 07	....
1884-85..	32	32,246 30	7,794 95	24,451 35	18,751 96	5,699 39	....
1885-86..	32	31,185 63	7,527 52	23,658 11	19,229 49	4,428 62	....
1886-87..	32	33,564 58	8,237 00	25,327 58	26,042 33	....	714 75
1887-88..	32	32,242 85	6,689 30	24,553 55	24,040 33	513 22	....
1888-89..	32	37,313 43	8,941 32	28,372 11	20,856 50	7,515 61	....
1889-90..	32	39,544 19	9,381 73	30,162 46	18,982 82	11,179 64	....
1890-91..	32	39,519 56	9,284 43	30,235 13	28,931 71	1,303 42	....
1891-92..	32	42,891 23	9,382 38	33,508 85	19,514 37	13,994 48	....
1892-93..	32	43,901 28	9,585 17	34,316 11	16,889 95	17,426 16	....
1893-94..	32	41,834 70	8,859 23	32,975 47	17,645 09	15,330 38	....
1894-95..	32	50,703 84	11,626 20	39,077 64	14,640 07	24,437 57	....
1895-96..	32	47,456 74	10,894 91	36,561 83	16,476 46	20,085 37	....
1896-97..	32	54,208 81	13,605 58	40,603 23	10,821 04	29,782 19	....
1897-98..	32	48,892 21	11,665 57	37,226 64	18,181 63	19,045 01	....
1898-99..	32	56,314 51	13,840 48	42,474 03	12,873 09	29,600 94	....
1899-1900	32	62,266 61	14,915 18	47,351 43	12,891 56	34,459 87	....
1900-01..	32	62,523 20	15,261 31	47,261 89	16,862 66	30,399 23	....

PRINCE EDWARD ISLAND RAILWAY.

CAPITAL ACCOUNT.

Total cost of road and rolling stock up to June 30, 1901 :—

Road, &c.	$3,643,598 21
Rolling stock	480,229 00
Total	$4,123,827 21

The rolling stock provided on capital account consists of :—

Engines.	Passenger car Stock.			Official cars.	Box, cattle and Refrigerator cars.	Platform car and coal cars.	Conductors' Vans.	Pay car.	Snow plough.	Flangers.
	1st class cars.	2nd class cars.	Baggage, smoking and postal cars.							
23	19	12	9	1	203 17 1	147 18	3	1	8	7
					221	165				

The capital expenditure during the year amounted to $280,173.93, of which $217,692.31 was expended on the construction of the Murray Harbour branch railway and the Hillsboro bridge, and $54,000 for steel rails, 56 lbs. to the yard.

Statement of rolling stock rebuilt during the year :—4 coal and 4 platform cars.

The following table shows the working expenses, the gross and net earnings, the tons of freight and number of persons carried each year since June 30, 1875, when the road was first opened for traffic :—

Year.	Miles in operation.	Working expenses.		Gross earnings.		Loss.		Tons of freight carried.	No. of passengers carried.
		$	cts.	$	cts.	$	cts.		
1875-76	199	214,930	43	118,060	96	96,869	47	28,358	93,964
1876-77	199	228,595	25	130,664	92	97,930	33	41,039	93,478
1877-78	199	221,599	49	135,899	60	85,699	89	38,923	111,428
1878-79	199	223,313	12	125,855	99	97,457	21	38,668	105,046
1879-80	199	164,640	55	113,851	11	50,789	44	37,208	90,533
1880-81	199	203,122	88	131,131	43	71,991	45	45,336	102,937
1881-82	199	228,259	97	137,267	54	90,922	43	48,315	118,436
1882-83	199	252,808	41	146,170	42	106,637	99	51,920	117,162
1883-84	199	236,428	13	144,504	12	91,924	01	51,841	118,988
1884-85	211	211,207	01	158,588	06	52,618	95	57,346	130,423
1885-86	211	216,744	34	155,584	36	61,159	98	57,913	120,374
1886-87	211	204,237	37	155,303	37	48,934	00	53,589	103,067
1887-88	211	229,639	95	158,363	62	71,276	33	59,603	131,246
1888-89	211	247,559	44	171,369	56	76,189	89	55,682	152,780
1889-90	211	266,485	85	160,971	78	105,514	07	51,604	133,099
1890-91	211	257,990	08	174,258	05	83,732	03	59,511	145,508
1891-92	211	289,706	38	157,442	69	132,263	69	51,065	139,389
1892-93	211	226,422	17	162,690	42	63,731	75	56,718	132,111
1893-94	211	226,891	06	158,533	83	68,357	23	53,577	123,727
1894-95	211	232,905	19	149,654	71	83,250	41	48,325	125,089
1895-96	211	225,138	56	146,476	54	78,662	02	46,395	122,586
1896-97	211	240,489	90	153,443	13	87,046	77	52,151	121,498
1897-98	211	231,418	74	158,950	61	72,468	13	57,539	126,510
1898-99	211	218,053	01	165,012	03	53,040	98	57,968	129,667
1899-1900	211	220,931	81	174,738	73	46,193	08	62,227	147,471
1900-01	211	261,766	24	193,883	48	67,882	76	73,696	157,793

The track stands the same as at date of my last annual report :—

	Miles.
Steel rails (50 and 56 lbs. to yard)	181½
Iron rails (40 lbs. to yard)	30½
Total length of road	212

The road and rolling stock are in good running condition.

CROW'S NEST PASS RAILWAY.

The construction of this road being considered a necessity for the successful development of the mining interests of British Columbia, Parliament by 60-61 Victoria, chapter 5, 1897, granted a subsidy of $11,000 per mile in aid of it. Under this Act the Canadian Pacific Railway Company undertook the work of construction, and entered into a contract, breaking ground on July 15, 1897.

The road was, for construction purposes, divided into two sections. Section 1 extended from Lethbridge to the crossing at the south end of Kootenay lake, a distance of 288·75 miles. Section 2 commenced at the end of section 1, at the crossing of the south end of Kootenay lake to Nelson, a distance of 54 miles, making a total of 342·75 miles. Section 1 has been completed some time, with the exception of the building of a permanent straightened line around the point at Bullhead Prairie, for which a certain amount has been retained from the subsidy. Of section 2 no work has been done at the south end of Kootenay lake, but the 20¾ mile subsection between Proctor and Nelson is practically completed and ready for traffic ; this subsection follows near the shores of the Kootenay lake ; the grades are light, the alignment is good and the road is well and substantially built. The section between Lethbridge and the south end of Kootenay lake, 288·75 miles, has continued to be operated successfully during the year.

The amount of the subsidy paid up to October 1, 1901, remains the same as appeared in my last annual report, viz.	$3,116,250
Balance of subsidy applicable to section 1 unpaid	60,000
Subsidy for section 2 unpaid	594,000
Total subsidy applicable	$3,770,250

The work of driving the tunnel at Bullhead Prairie is in progress and is rapidly drawing towards completion.

SURVEYS FOR A RAILWAY TO THE YUKON DISTRICT FROM A POINT ON AN EXISTING RAILWAY, AND ALSO FROM AN OCEAN PORT IN BRITISH COLUMBIA.

Mr. J. S. O'Dwyer's report will be found attached hereto, as an appendix. He represents that a feasible line can be had between Edmonton and Teslin.

	Miles.
1st. Prairie Section.	
Edmonton to mouth of D'Echafaud river, at the confluence of the D'Echafaud and Peace rivers	415
2nd Central Section.	
Mouth of D'Echafaud river to the mouth of Sestoot river, at its confluence with the Skeena river	393
3rd Northern Section.	
Mouth of Sestoot river to Teslin, at the south end of Teslin lake	432
Total approximate distance—Edmonton to Teslin	1,240

ESTIMATED COST.

	Miles.	
1st.—Prairie section	415	$ 7,320,680
2nd.—Central section	393	7,162,229
3rd.—Northern section	432	8,082,700
Total of above		$ 22,565,609
Special buildings		343,000
Total estimated cost of construction, at eastern prices		$ 22,908,609
Add 60 per cent for western prices		13,745,165
Total estimated cost of construction		36,653,774
Rolling stock		1,866,000
Estimated cost of construction and equipment (average rate per mile $31,064)—(1,240 miles)		$ 38,519,774

BRANCH FROM TRUNK LINE TO SEA COAST.

Mr. O'Dwyer gives the length of this branch from the mouth of Sestoot river,—its junction with the trunk line,—to Port Simpson as 307 miles ; the cost of constructing and equipping he puts at :—

Estimated cost of construction (at eastern prices)	$ 9,170,900
Special buildings	127,500
Total estimated cost of construction (at eastern prices)	$ 9,298,400
Add 60 per cent for western prices	5,579,040
Total estimated cost of construction (at western prices)	$ 14,877,440
Rolling stock	438,100
Total estimated cost of construction and equipment, at western prices (307 miles)	$ 15,317,540

(Average rate per mile, $49,894.)

OCEAN PORT LINE.

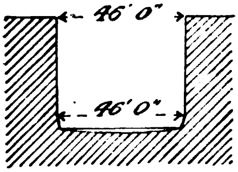
(Port Simpson to Teslin.)

Treated independently of the trunk line.

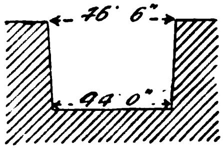
Mr. O'Dwyer gives the length of the projected line from Port Simpson to the head of Lake Teslin as 739 miles ; the cost of constructing and equipping he puts at :

Estimated cost of construction (at eastern prices)....	$ 17,253,600
Special buildings	278,000
Total estimated cost of construction (at eastern prices)	$ 17,531,600
Add 60 per cent for western prices	$ 10,518,960
Total estimated cost of construction (at western prices)	$ 28,050,560
Rolling stock..............................	$ 1,060,100
Total estimated cost of construction and equipment at western prices—(739 miles)......	$ 29,110,660

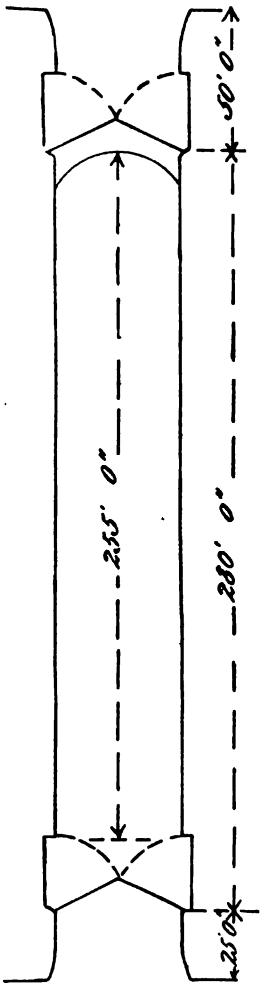
(Average rate per mile, $39,392.)



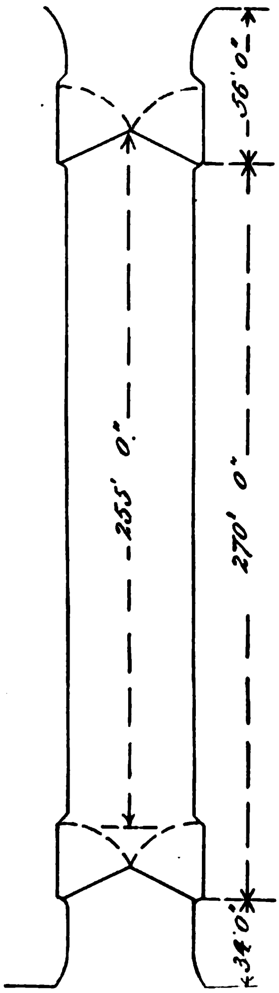
SECTION OF
SOULANGES CANAL LOCK.



SECTION OF
WELLAND CANAL LOCK



SOULANGES CANAL LOCK.



WELLAND CANAL LOCK

CANALS.

The two diagrams on the preceding page practically give the key to the whole navigation between Montreal and Lake Superior. There are no locks to be passed of less dimensions than the Welland canal lock shown.

CONSTRUCTION AND ENLARGEMENT.

Works of canal construction are confined to the Soulanges canal, the Sault Ste. Marie canal and the Trent canal.

Works of canal enlargement cover the Lachine canal, Cornwall canal, Farran's Point canal, Rapide Plat canal, Galops canal and Grenville canal.

CONSTRUCTION.

SOULANGES CANAL.

This canal is 14 miles in length, extending from Cascade Point to Coteau Landing. The work remaining to be done is the finishing of the highway on the north bank of the canal, some sodding of the slopes of the prism, all on sections 4, 5, 6 and 7—Andrew Onderdonk, contractor; the completion of the electrical instalment for the operation of the lock gates and valves, for which the Canadian Electric Company are the contractors; the completion of the berths for spare gates, &c., at Cascade Point, for which Messrs. Quinlan & Robertson are the contractors. It is confidently expected that these works will be fully completed before the opening of navigation in the spring of 1902. The staff of engineers are now engaged in completing the final estimates.

Total expenditure up to June 30, 1900.	$5,792,066 07
Expended during the year ended June 30, 1901. . . .	462,626 36
Total expenditure up to June 30, 1901	$6,254,692 43
Expended from June 30, 1901, to October 1, 1901. . . .	71,517 67
Total expenditure up to October 1, 1901. . . .	$6,326,210 10

SAULT STE. MARIE CANAL.

This canal is 1⅛ miles in length. It is designed to pass vessels which will pass over a mitre sill of lock submerged in 20 feet 4 inches of water. The canal proper is completed, but the approaches both at the upper and lower entrances require to be deepened, there being only 18 feet of water in the upper entrance and 18 feet 6 inches in the lower entrance. Both entrances also require to be widened. The work of dredging the lower entrance to the required depth and width is under contract with Mr. A. F. Bowman, contractor, who has the work well advanced. In addition to the works aforementioned, the canal grounds require to be levelled off and laid out in neat form.

Total expenditure up to June 30, 1900	$3,769,671 67
Expended during year ended June 30, 1901........	323,353 93
Total expended up to June 30, 1901	$4,093,025 60
Expended from June 30, 1901, to October 1, 1901....	54,066 23
Total expenditure up to October 1, 1901....	$4,147,091 83

TRENT CANAL.

This canal, when carried out in its entirety, will extend from Lake Ontario to the Georgian bay on Lake Huron at the mouth of the Severn river. The total distance will be about 192 miles. The proposed course is as follows :—Commencing at Trenton, on the Bay of Quinté, near Brighton, Trenton river, Rice lake, the Otonabee river, Clear lake, Lovesick lake, Buckhorn lake, Pigeon river, Sturgeon lake, Shallow lake, Rosedale river, Balsam lake, Lake Simcoe, Lake Couchiching and the River Severn at the Georgian bay, Lake Huron. The works on this canal completed are : Lock and dam at Chisholm's rapids, dam at Healy's Falls Point, lock and dam at Hastings, lock and dam at Peterborough, 2 locks and 2 dams at Young's Point, lock and dam at Burleigh Falls, lock and 2 dams at Lovesick, lock and dam at Buckhorn, lock and dams at Bobcaygeon, 2 locks and dam at Fenelon Falls, lock at Rosedale. (The lock at Young's Point and the lock at Rosedale, I should mention, are the property of the Ontario government.)

The works now under construction are the division of the canal between Peterborough and Lakefield, about 9 miles in length, and the division between Balsam lake and Lake Simcoe, a distance of 19 miles. The Peterborough-Lakefield division, for construction purposes, is divided into two sections. The section between Peterborough and Nassau is under contract with Messrs. Corry and Laverdure. The chief works of construction are the building of a hydraulic lift lock, an ordinary lift lock, a dam, waste weir, bridges, entrance piers, culverts, and the forming of the prism. This work, I may say, is practically completed with the exception of the lift lock, which is far advanced towards completion, and is progressing daily. The work so far is, I believe, of excellent quality. It is not thought that at the rate of speed at which the work is progressing it will be completed this season. The Dominion Bridge Company, of Lachine, have the contract for the steel superstructure of the lift lock and have had a large quantity of the structure in store, already manufactured and ready to put in place ; but owing to the substructure not being ready to receive it, nothing has yet been done towards its erection. It is hoped that the erection will be proceded with next season.

The section between Nassau and Lakefield is under contract with Messrs. Brown, Love and Aylmer. The chief work is the construction of 5 locks, 5 dams, a bridge, the forming of the prism through the town of Lakefield, the deepening of the River Otonabee at several points, the building of entrance piers, and the diverting of the highway betwen Nassau and Lakefield. These contractors have completed their work, with the exception of the dredging of rock in the River Otonabee, near Lakefield, which rock has already been drilled and blasted. The structures are strong, neat and substantial.

The Simcoe Balsam Lake Division, for construction purposes, is divided into three sections.

Section 1. Balsam Lake to Kirkfield is under contract with Andrew Onderdonk. The works of chief importance on this section were : the building of entrance piers at Balsam Lake, the construction of bridges, a dam, guard gates, and the excavation of the prism through heavy rock cuts. The work is now all completed, and the final estimate is being prepared.

Section 2. Kirkfield northward for 7½ miles is under contract with Messrs. Larkin & Sangster. The more important works of construction are : the building of a lift lock, several bridges and dams, and a moderate quantity of rock excavation in forming prism of canal. The work of forming the prism of the canal is being prosecuted with vigour, but the only structural work so far done is the building of concrete abutments of a highway bridge.

Section 3. From the end of Messrs. Larkin & Sangster's contract to Lake Simcoe. This work is under contract with Messrs. Brown & Aylmer. The chief features of the work are the construction of six locks, the extensive entrance piers on Lake Simcoe, a railway bridge, several highway bridges, a culvert, and forming the prism of the canal. The work so far done has been chiefly in clearing, excavating and fencing. A culvert has been built, and the contractors are now working at the railway bridge.

The following is a statement of the expenditure made on the construction of this canal from its commencement :

Expenditure prior to June 30, 1867	$ 309,371 31
Expenditure prior to works now under contract, June 30, 1894	782,524 88
Expenditure from June 30, 1894, to June 30, 1900..	1,785,927 29
Total expenditure up to June 30, 1900......	$2,877,823 48
Expended during year ended June 30, 1901........	284,503 89
Total expenditure up to June 30, 1901......	$3,162,327 37
Expended from June 30, 1901, to October 1, 1901....	77,695 69
Total expenditure up to October 1, 1901....	$3,240,023 06

ENLARGEMENT.

LACHINE CANAL.

This canal is 8½ miles in length, extending from Montreal to Lachine. The enlargement works for what is termed a 14-foot navigation are completed, with the exception of a few thousand cubic yards of stone lining of the slopes of the prism.

However, some time ago it was determined to give a 20-foot navigation from the harbour of Montreal to several of the basins in the canal, and with this view the government dredge has been working between the lower entrance and the St. Gabriel Basin for the last few seasons. It is in contemplation to build a lock with 20 feet of water on the mitre sill, 600 feet long and 50 feet wide, the plans of which have been prepared and tenders received ; but some delay has occurred in consequence of a difference of opinion having arisen as to its exact location. Contracts have been let for an electrical instalment for lighting the canal and working the lock gates, bridges and valves by electrical power. The Canadian Electric Company have the contract for installing the electrical machinery. &c. Messrs. Ahearn & Soper, of Ottawa, are the contractors for the poles, wire cables, &c., and the erection of same. For the erection of the upper portion of the power house, Messrs. J. B. Gratton & Co. are the contractors, the foundation of the power house having been built by the government by day's labour.

The following contractors satisfactorily completed their contracts during the year :—

1. M. J. Hogan, contractor for regulating weir at Lachine.

2. Messrs. Brewder & McNaughton, contractors for deepening the St. Pierre River.

3. Messrs. Wm. Kennedy & Sons, contractors for hydraulic machinery for power house.

4. Messrs. Martineau & Sons, contractors for 303 feet of wooden flume to carry water from the upper reach to the turbines.

Total expenditure up to June 30, 1900............	$8,322,570 57
Expended during year ended June 30, 1901	97,305 52
Total expenditure on enlargement up to June 30, 1901	$8,419,876 09
Expended from June 30, 1901, to October 1, 1901....	6,105 12
Total expenditure on enlargement up to Oct. 1, 1901.	$8,425,981 21

CORNWALL CANAL.

This canal is 11 miles in length, extending from Cornwall to Dickenson's Landing. The works of enlargement on this canal are drawing to a close. The only work remaining to be done is : First, the completion of the work of improvement at the upper entrance opposite Dickenson's Landing, under contract with the Weddell Dredging Company, which work is composed of excavation in widening the approach to the canal on the land side. The work is about three-quarters done ; second, the strengthening of the north bank in front of the east end of the town of Cornwall, which has not yet been placed under contract ; third, the supplying electrical power to work the lock gates, valves and bridges, and to light the canal by electricity, which work is in progress under contract with Mr. M. P. Davis ; fourth, the enlarging of the regulating weir at lock No. 17, which has become necessary by reason of the additional water power leased to the paper mill at Cornwall. No steps have yet been taken to proceed with the work.

Total expenditure up to June 30, 1900	$4,787,272 78
Expended during the year ended June 30, 1901	62,032 47
Total expenditure on enlargement up to June 30, 1901	$4,849,305 25
Expended from June 30, 1901 to October 1, 1901	28,976 42
Total expenditure on enlargement up to October 1, 1901	$4,878,281 67

FARRAN'S POINT CANAL.

This canal is one mile in length, extending from Farran's Point for one mile westward. The work of enlargement of this canal is under contract with the Canadian Construction Company. The most important works covered by their contract were : Entrance piers, at both ends, a lock 800 feet long, 50 feet wide, with 14 feet of water on the mitre sill, the deepening, straightening and widening of the prism. These works are completed, with the exception of two or three thousand cubic yards of dredging which it is expected will be completed before winter sets in.

Total expenditure up to June 30, 1900	$686,646 38
Expenditure during year ended June 30, 1901	111,158 39
Total expenditure on enlargement up to June 30, 1901	$797,804 77
Expended from June 30, 1901 to October 1, 1901	11,970 15
Total expenditure on enlargement up to October 1, 1901	$809,774 92

RAPIDE PLAT CANAL.

This canal is 3⅞ miles in length, extending from Morrisburg westward 3⅞ miles. The works of enlargement are completed, with the exception of the work of widening out the upper entrance on the land side and building a new entrance pier, which work is progressing very slowly under contract with Messrs. Gilbert Brothers. The Weddell Dredging Company completed the work of straightening at Mariatown Point during the year.

Total expenditure up to June 30, 1900	$1,889,799 71
Expended during year ended June 30, 1901	76,501 57
Total expenditure on enlargement up to June 30, 1901	$1,966,301 28
Expended from June 30, 1901 to October 1, 1901	18,942 30
Total expenditure on enlargement up to October 1, 1901	$1,985,243 58

GALOPS CANAL.

This canal is 7½ miles in length. It extends from Iroquois to Cardinal. The works of enlargement of this canal were of considerable magnitude, the most important works of which were: A lock 800 feet long, 50 feet wide, two locks 270 feet long, 45 feet wide, one of which is a guard lock, all with 14 feet of water on the mitre sills; two weirs, two bridges, a new cut for over 4 miles, of which the cut at Cardinal is about one mile in length and 64 feet deep at the summit; entrance piers at both ends, the building of retaining walls and constructing a new road. For construction purposes this canal was divided into four contracts, viz. :—

1. Iroquois to Presqu'ile—Messrs. Larkin & Sangster, contractors.
2. Presqu'ile to Gates' Point—Messrs. Wm. Davis & Sons, contractors.
3. Gates' Point to Upper Entrance—Messrs. Murray & Cleveland, contractors.
4. Outside Upper Entrance—William Allan, contractor.

Of these contracts, that of William Allan, is the only one completed.

Messrs. Larkin & Sangster have practically completed their work, there remaining to be done about 3,000 cubic yards of dredging, a few cubic yards of masonry and a small piece of ditching, all of which it is hoped will be finished before the season closes.

Messrs. Wm. Davis & Sons' work was very heavy, and is not so near completion. It will most certainly not be finished this season. There remains yet to be done considerable dredging, to complete the straightening and widening, and several thousand cubic yards of masonry lining to the slopes of the Cardinal cut, as well as some thousands of cubic yards of stone filling behind the masonry walls, also sodding and trimming of slopes, &c.

Messrs. Murray & Cleveland are bringing their work to a close, but will scarcely complete them this season; the works remaining to be done are the completion of the straightening of the canal at McLaughlin's Point, and the construction of some cribs at the eastern end of their contract.

Total expenditure up to June 30, 1900	$4,138,636 65
Expended during year ended June 30, 1901	390,112 78
Total expenditure on enlargement up to June 30, 1901	$4,528,749 43
Expended from June 30, 1901 to October 1, 1901	125,359 04
Total expenditure on enlargement to October 1, 1901	$4,654,108 47

WELLAND CANAL.

The trunk line of this canal is 26¾ miles in length, extending from Port Dalhousie on Lake Ontario to Port Colborne on Lake Erie. The works of enlargement were commenced in August, 1873, and completed in 1887, since which the water in Lake Erie has fallen lower than the level previously recorded, so that it has become necessary to lower the mitre sill of the lock at Port Colborne (the upper entrance to the canal), and also to deepen the prism in the long reach, for both of which works parliament has provided an appropriation ; these works will be carried out before the opening of navigation next spring. It is also in contemplation to remove the pivot piers of the bridges crossing the canal, and to build swing bridges, giving a clear span over the whole channel. At Port Colborne large works are in progress which, when completed, will enable vessels drawing 20 feet of water to enter the head of the canal and transfer their cargoes through elevators into vessels suitable for navigating the enlarged canals to Montreal, the head of ocean navigation. The Department of Railways and Canals, as their part of the work, are deepening the entrance sufficient to give a clear depth of 22 feet of water and building two piers on which to erect elevators, and are also otherwise improving the facilities at this point of shipping. The Department of Public Works, with a view of assisting in the encouragement of trade through the canals, are building a breakwater about a mile in length and dredging out the harbour within the line of the breakwater. When these works are fully completed, it is believed a very considerable increased trade will find its way to Montreal by way of our canal system. Considerable progress has been made with them, but there yet remains much to be done before they are available for service.

Total expenditure up to June 30, 1900	$16,095,979 02
Expended during the year ended June 30, 1901	224,536 96
Total expenditure on enlargement up to June 30, 1901	$16,320,515 98
Expended from June 30, 1901, to October 1, 1901	78,117 34
Total expenditure on enlargement up to October 1, 1901	$16,398,633 32

In addition to the 26¾ miles of the trunk line of this canal, there are four branches available for small craft :—

	Mile.
1st. Port Robinson to Welland river	½
2nd. Chippawa to Niagara river	¼
3rd. Grand river feeder	21
4th. Port Maitland branch	1¾

GRENVILLE CANAL.

This canal is 5¾ miles in length, extending from the town of Grenville towards Carillon, 5¾ miles. It is not on the line of the 14-foot navigation, but is on the line of route between Montreal and Ottawa. The chief work comprised in Messrs. Piggott and Ingles' contract was the widening of the prism at certain points to 50 feet at the bottom. The work was completed, as stated, in the reports of last year, in May, 1900. The improvement is much appreciated by those who navigate these waters.

The enlargement of this canal was commenced in 1870, and the enlarged canal was opened for navigation in 1884.

Total expenditure on enlargement up to June 30, 1900.	$4,114,108 67
Expenditure during the year ended June 30, 1901 ..	4,930 65
Total expenditure on enlargement up to June 30, 1901..	$4,119,039 32
Expended from June 30, 1901, to October 1, 1901...	Nil.
Total expenditure on enlargement up to October 1, 1901	$4,119,039 32

ST. LAWRENCE RIVER AND LAKE IMPROVEMENT.

LAKE ST. LOUIS.

The work done in this lake was the cutting of a direct channel from the upper entrance of the Lachine canal westward for about 2 miles in length, 300 feet in width, giving a depth of 17 feet of water. Since the actual work was completed, the engineering staff have been engaged in making a chart of the channel and lake which, when completed, will be of great value.

Total expenditure up to June 30, 1900	$261,832 18
Expended during the year ended June 30, 1901	12,918 31
Total expenditure up to June 30, 1901	$274,750 49
Expended from June 30, 1901, to October 1, 1901.. ..	704 09
Total expenditure up to October 1, 1901.. ..	$275,454 58

LAKE ST. FRANCIS.

This work comprised the cutting of a direct channel 300 feet wide, with a depth of 17 feet of water through the Coteau shoal, the Horse Back shoal, the Highlander shoal, the Middle shoal, and the St. Regis shoal. The work is being carried through under contract with Messrs. Manning and McDonald, and it is expected that it will be completed by the end of the present season.

Total expenditure up to June 30, 1900..	$41,961 46
Expended during year ended June 30, 1901..	15,000 00
Total expenditure up to June 30, 1901..	$56,961 46
Expended from June 30, 1901, to October 1, 1901..	13,945 25
Total expenditure up to October 1, 1901..	$70,906 71

GALOPS RAPIDS.

This work, owing to the heavy rapid current, was a work both difficult and costly of execution. The work was composed entirely of submarine rock excavation in forming a channel 200 feet wide with a depth of 17 feet of water, through Upper Bar, North and Caledonia shoals, Island shoals and Lower Bar. Messrs. Gilbert Brothers are the contractors. Owing to the difficulties attending the execution of this work, the progress being made is necessarily slow, but the work is drawing towards completion.

Total expenditure up to June 30, 1900	$763,192 03
Expended during the year ended June 30, 1901	91,211 97
Total expenditure up to June 30, 1901	$854,404 00
Expended from June 30, 1901, to October 1, 1901	....
Total expenditure up to October 1, 1901	$854,404 00

NORTH CHANNEL.

This work is the cutting and forming of a channel about 2½ miles long, 300 feet wide, with a depth of 16 feet of water, from a point about one mile west of the upper entrance to the Galops Canal, in a direct line to deep water off Chimney Point, and the building of a dam across the 'Gut' between Adams and Ogden's Islands. Mr. M. A. Cleveland is the contractor for this work. He has prosecuted it steadily and diligently from its commencement, and, with the exception of the dam, which is not yet commenced, owing to the sanction of the United States government for its construction not yet having been received, the work is fast drawing to a close, and it is hoped that it will be completed before June 30, 1902. I may here observe that if the dam is to be built, and in my opinion it certainly should be, in order to cut off a cross current, no unnecessary delay should occur in giving authority to proceed with the work.

Total expenditure up to June 30, 1900	$ 858,316 15
Expended during the year ended June 30, 1901	184,790 34
Total expended up to June 30, 1901	$1,043,106 49
Expended from June 30, 1901, to October 1, 1901	25,947 57
Total expenditure up to October 1, 1901	$1,069,054 06

ST. LAWRENCE RIVER AND CANALS.

The work under this heading is the supplying of gas and other buoys through the buoy tender *Scout*, the sweeping and surveying of the St. Lawrence River and canals throughout, from Coteau Landing to Prescott, &c.

Total expenditure up to June 30, 1900	$383,561 36
Expended during the year ended June 30, 1901	19,389 75
Total expenditure up to June 30, 1901	$402,951 11
Expended from June 30, 1901, to Oct. 1, 1901	9,869 82
Total expenditure up to October 1, 1901	$412,820 93

To summarize, I may state the cost of construction and enlargement of the canals and improvements to the rivers and lakes up to June 30, 1901, to be as follows, viz.:—

ROUTE FROM MONTREAL TO PORT ARTHUR.

—	Original construction of Canals.	Enlargement of Canals.	Improvements to St. Lawrence Rivers and Lakes.	Total Expenditure.
	$ cts.	$ cts.	$ cts.	$ cts.
Lachine Canal	2,589,532 85	8,419,876 09		
Lake St. Louis			274,750 49	
Soulanges Canal	6,254,692 43			
Lake St. Francis			56,961 46	
Cornwall Canal	1,945,624 73	4,849,305 25		
Williamsburg Canals :—				
Farran's Point		797,804 77		
Rapide Plat	1,320,655 54	1,966,301 28		
Galops		4,531,236 06		
Galops Rapids			854,404 00	
River Reaches			630,159 84	
North Channel			1,043,106 49	
Murray Canal	1,247,470 26			
Welland Canal	7,693,824 03	16,320,515 98		
Sault Ste Marie	4,093,025 60			
Total	25,144,825 44	36,885,039 43	2,859,382 28	64,889,247 15

If to the above total there is added the cost, $1,636,690.26, of the Beauharnois Canal, now not required for navigation, the total expenditure is $66,525,937.41.

ROUTE FROM LACHINE TO OTTAWA.

—	Original Construction.	Enlargement.
	$ cts.	$ cts.
Ste. Anne's Lock	134,456 51	1,035,759 12
Carillon and Grenville Canals	63,053 64	4,119,039 32
Total	197,510 15	5,154,798 44

ROUTE FROM OTTAWA TO KINGSTON.

—	Original Construction.	Enlargement.
	$ cts.	$ cts.
Rideau Canal	4,084,323 37	Nil.
Tay Canal	489,599 23	Nil.
Total	4,573,922 60	Nil.

ROUTE FROM ST. JOHNS, P.Q., TO SOREL.

—	Original Construction.	Enlargement.
	$ cts.	$ cts.
Chambly Canal	637,056 76	Nil.
St. Ours Lock	121,537 65	Nil.
Total	758,594 41	Nil.

ROUTE FROM TRENTON TO GEORGIAN BAY.

—	Original Construction.	Enlargement.
	$ cts.	$ cts.
Trent Canal	3,162,327 37	Nil.
Total	3,162,327 37	Nil.

ROUTE FROM ATLANTIC OCEAN TO BRAS D'OR LAKES.

—	Original Construction.	Enlargement.
	$ cts.	$ cts.
St. Peters Canal—Cape Breton	248,762 84	399,784 30
Total	248,762 84	399,784 30

following canals are no longer required for navigation purposes : The Culbute, which has been abandoned for some years, and the Beauharnois Canal, which will, it is assumed, be closed to navigation next season. The cost of constructing these two canals was as follows, viz. :—

Culbute Canal	$ 382,906 46
Beauharnois Canal	1,636,690 26
	$2,019,596 72

MAINTENANCE AND OPERATION.

In treating of the maintenance and operation of the canals, I shall first take the canals in the order in which they are located on the trunk line of waterway between Montreal, the head of ocean navigation, and Port Arthur, at the upper end of Lake Superior, the head of lake navigation, commencing with the Lachine Canal at Montreal.

LACHINE CANAL.

Operation.

The traffic through this canal was only twice interrupted during the year, viz. : 1st. On October 10, 1900, the steamer *Alexandria* struck Brewster bridge, damaging it, on which occasion navigation was suspended for six hours, whilst the repairs were being made. 2nd. On November 21, 1900, the barge *Frontenac* damaged the St. Paul's bridge by running against it, navigation on this occasion was interrupted for nine hours whilst repairs were being made. With these two exceptions this canal was successfully operated during the year.

Maintenance.

The cost of repairs made during the year ended June 30, 1901, is as follows :—

Ordinary repairs under the head of staff and repairs		$ 50,005 48
Special repairs under the head of income :		
Scow and fitting up with machinery	$ 3,993 20	
Steel rollers for Wellington bridge	1,954 24	
To rebuild wall, basin No. 2	6,125 43	
		12,072 87
Total		$ 62,078 35

SOULANGES CANAL.

Operation.

The electrical machinery for operating the lock gates, valves and bridges not having been fully completed and in working order, the gates, valves and bridges were worked by manual labour ; but it is expected that the electrical instalment will be in full working order before navigation opens next season, as a result the staff em.. will be much smaller then than it is now. The canal has been operated with only slight interruption to navigation whilst some changes were being made in the sluices. The grain traffic through during the season of 1900, was as follows, viz. :—

	Bushels.
Grain from the Canada Atlantic Railway	11,220,586
Grain from Kingston and River St. Lawrence	7,707,000
Grain-steamers through from Lake Erie	500,000
Total bushels for the season of 1900	19,427,586

During the season of 1900, 2,976 vessels passed through the canal.

From the opening of navigation on May 1, 1901, to August 31, 1901 :

	Bushels.
Grain from the Canada Atlantic Railway	7,211,526
Grain via St. Lawrence River	4,311,614
Total bushels up to August 31, 1901	11,523,140

The total volume of traffic which passed through the canal from May 1 to August 31, 1901, is :—

	Tons.
Grain	327,674
Coal	221,557
Oil	9,675
Lumber	9,948
Oil cake	393
Pork	1,908
Firewood	480
General merchandise	17,417
Total tons	599,052

The probabilities are, therefore, that the volume of traffic through the canal will, at the close of the season, show a great increase over that of the season of 1900.

Maintenance.

The cost of repairs made during the year ended June 30, 1901, is as follows :—

Ordinary repairs under the head of staff and repairs	$ 5,888 77
Special repairs under the head of income :	
M. Clement, injuries received and medicine and attendance	115 00
Total	$ 6,003 77

CORNWALL CANAL.

Operation.

No accident occurred in connection with the operation of this canal, and navigation was maintained without interruption.

Maintenance.

The cost of repairs during the year was as follows :—

Ordinary repairs under head of staff and repairs	$ 13,166 89
Special repairs under the head of income..........	....
Total..........	$ 13,166 89

WILLIAMSBURG CANALS.

Operation.

These canals compose the Farran's Point canal, the Rapide Plat canal and the Galops canal. Naivgation on these canals was conducted without accident, and in a fairly satisfactory manner, considering the extensive works of enlargement in progress.

Maintenance.

The cost of repairs during the year was as follows :—

Ordinary repairs under head of staff and repairs......	$ 11,755 09
Special repairs under head of income..........	....
Total	$ 11,755 09

WELLAND CANAL.

Operation.

With the exception of two accidents, which caused delay to traffic, the canal has been operated with success during the year. 1st. The steamer *Waccamaw* bound down on October 10, 1900, struck the lower gates of lock 6, damaging them considerably and causing interruption to navigation for sixty hours whilst the repairs were being made. 2nd. On May 1, 1901, the steam barge *Van Allen* bound down struck the lower gates of lock 6, carrying them away ; the rush of water thereby also carried away the upper gates ; spare gates, being in stock, were at once brought on the ground and stepped. The execution of this work occupied forty-eight hours, during which time navigation was interrupted.

Maintenance.

The cost of repairs during the year is as follows :—

Ordinary repairs under head of staff and repairs..		$72,055 89
Special repairs under head of income :—		
Renewal of west pier at Port Dalhousie..	$27,431.79	
Renewal of docking below lock 1..	1,536.08	
Renewal of masonry wall, lock 24	13,920.65	
Renewal of pile fenders, three bridges..	11,117.70	
General repairs..	30,000.00	
Outlet drainage at Port Colborne	3,771.21	
		87,777 43
Total..		$159,833 32

SAULT STE. MARIE CANAL.

Operation.

In approaching this canal, several vessels have met with accidents by reason of getting out of the channel, but the canal has been operated without interruption. During the year 3,597 vessels passed through the canal, of an aggregate tonnage of 2,489,253 tons. Of this tonnage, 589,530 was in Canadian bottoms. The average time occupied for making a lockage was 15¼ minutes.

Maintenance.

The cost of repairs during the year is as follows :—

Ordinary repairs under head of staff and repairs	$10,289 18
Special repairs under head of income—	
Pair of lock gates..	48 39
Total..	$10,337 57

The Lachine canal is the first and the Sault Ste. Marie canal the last on the trunk line of navigation between Montreal and Port Arthur.

CHAMBLY CANAL.

Operation.

Navigation on this canal was uninterrupted during the year.

Maintenance.

The cost of repairs during the year is as follows :—

Ordinary repairs under head of staff and repairs		$17,572 35
Special repairs under head of income—		
Rebuilding bridge on Iroquois river	$999 59	
Surveying property and planting stones..	195 50	
		$ 1,195 09
Total..		$18,767 44

ST. OURS LOCK AND DAM.

Operation.

No interruption occurred to navigation during the year at this point.

Maintenance.

The cost of repairs during the year is as follows :—

Ordinary repairs under head of staff and repairs	$1,631 44
Special repairs under the head of income—	
Rebuilding dam and ice breaker	3,610 06
Total..	$5,291 50

STE. ANNE'S LOCK.

Operation.

Navigation through this lock was uninterrupted during the year.

Maintenance.

The cost of repairs during the year is as follows :—

Ordinary repairs under head of staff and repairs	$3,999 02
Special repairs under head of income	Nil.
Total..	$3,999 02

CARILLON AND GRENVILLE CANALS.

Operation.

These canals were operated during the year without interruption to navigation.

Maintenance.

The cost of repairs during the year is as follows :—

Ordinary repairs under head of staff and repairs		$13,416 00
Special repairs under head of income—		
Rebuilding wall below lock 6	$1,697 14	
Rebuilding guide piers	7,634 81	
		9,331 95
Total		$22,747 95

BEAUHARNOIS CANAL.

Operation.

Since the Soulanges Canal was opened the traffic through this canal has amounted to very little, a few market boats only using it. The day is, therefore, not far distant when it will be closed to navigation, and used only as a water power for manufacturing purposes. Even so, a small staff will have to be employed to regulate the water and keep the bridges, &c., in repair.

Maintenance.

The cost of repairs during the year is as follows :—

Ordinary repairs under head of staff and repairs	$14,199 12
Special repairs under head of income : Surveying and defining land boundaries	483 40
Total	$14,682 52

MURRAY CANAL.

Operation.

No accidents occurred on this canal during the year, and navigation was not interrupted. Eight hundred and twelve vessels passed through during the year.

Maintenance.

The cost of repairs during the year is as follows :—

Ordinary repairs under head of staff and repairs	$1,138 15
Special repairs under head of income	....
Total	$1,138 15

RIDEAU CANAL.

Operation.

This canal was operated during the year without interruption to navigation.

Maintenance.

The cost of repairs during the year was as follows :—

Ordinary repairs under head of staff and repairs......	$33,791 17
Special repairs under head of income...............	....
Total	$33,791 17

TRENT CANAL.

Operation.

This canal had no interruption to navigation during the year. The number of lockages were 4,328.

Maintenance.

The cost of repairs during the year is as follows :—

Ordinary repairs under the head of staff and repairs....		$13,075 89
Special repairs under head of income—		
Five guard piers	$1,796 51	
Dredging channel below Buckhorn Lock	1,273 92	
" " Hutchison's Lock.	2,124 37	
Dredging shoals in Otonabee River	3,500 02	
Salary of H. S. Greenwood, asst. engineer, whilst absent with 2nd contingent in South Africa—March 1, 1900, to Dec. 31, 1900........................	1,500 00	
Gratuity to widow of late G. E. Robertson, asst. engineer..................	300 00	
		10,494 82
Total..........................		$23,570 71

ST. PETER'S CANAL.

Operation.

This canal has been operated successfully and without interruption to navigation during the year, and 1,603 vessels passed through the canal.

Maintenance.

The cost of repairs during the year is as follows :—

Ordinary repairs under head of staff and repairs........	$ 841 63
Special repairs under head of income : General repairs and improvements	2,311 26
Total	$3,152 89

SUMMARY.

Cost of maintenance and operation of the canal system for the year ended June 30, 1901..	$638,909 72
Net revenue of canals after deducting refunds......	315,425 69
Excess of cost of maintenance and operation over revenue	$323,484 03

PROPOSED OTTAWA AND GEORGIAN BAY CANAL.

OTTAWA RIVER SURVEYS.

An appropriation was made by Parliament of $10,000 for surveys of the Ottawa river in connection with the proposed Ottawa and Georgian Bay canal. Mr. H. A. F. MacLeod, an engineer of long experience, and thoroughly reliable, was entrusted with the work of making the surveys. His report, which is very interesting, will be found as an appendix to this report. After giving much detail as to the work he has accomplished in making surveys and preparing plans and estimates of the cost of this proposed canal, from Montreal to Georgian Bay—a distance estimated at 430 miles—he estimates the cost for 14 feet navigation at $23,898,000, and the cost for 20 foot navigation at $72,627,000.

The above estimates are approximate only, and I am disposed to think that, in both cases, it would be prudent to add about 25 per cent to the figures given, as, judging from my observations in connection with carrying out such works to completion, the engineer's estimates are often far exceeded by unforeseen difficulties of construction.

The appropriation made by Parliament for a survey in view of improvements to navigation of the Ottawa river is :

For 1899-1900..	$ 10,000
1900-1901..	10,000
Total amount of appropriation..	$ 20,000

The total expenditure under these appropriations up to June 30, 1900, is	$ 9,994 90
Expended during the year ended June 30, 1901........	9,999 65
Total expenditure	$ 19,994 55

RAILWAY SUBSIDIES.

Subsidies to railways continue to be voted in such a form that it is not possible to show the amount of cash subsidy granted, as the amount of subsidy will, in many cases, be based upon the cost of each road. For this reason, I am again, this year, unable to give the amount of each subsidy available, but I shall, as heretofore, show the actual amount paid ; also the number of miles of railway for which subsidy granted, per mile, was available on July 1, 1900, and the number of miles of railway (built up to July 30, 1901), for which cash subsidy, per mile, was granted. There will also be found the amount of subsidy paid up to October 1, 1901, and a statement of cash subsidy, per annum, paid up to June 30, 1901, with the number of miles built. Also a statement showing the railways to which subsidies have been granted aid in land.

Amount of cash subsidy, per mile, paid up to June 30, 1901	$21,571,136 17
Number of miles of railway on which cash subsidy, per mile, was paid up to June 30, 1901	3,954
Amount of cash subsidy, per mile, paid up to June 30, 1901	$22,255,766 17
Cash subsidy, per annum, paid up to June 30, 1901	2,239,200 00
Number of miles built on cash subsidy, per annum, to June 30, 1901	252
Number of miles of railway to which aid in land has been authorized	2,937
Number of acres of land, the grant of which in aid of railways, has been authorized	21,518,144

The foregoing statements do not include the grants in cash and land to the Canadian Pacific Railway, the Canadian Central Railway and the Esquimalt and Nanaimo Railway.

These roads, as previously reported, received, in cash, as follows :—

Canadian Pacific Railway (mileage, 1,905)	$ 25,000,000
Canada Central Railway (mileage, 120)	1,525,250
Esquimalt and Nanaimo Railway (mileage, 71)	750,000
Total	$ 27,275,250

In land, as follows :—

	Acres.
Canadian Pacific Railway	25,000,000
Esquimalt and Nanaimo Railway	1,900,000
Total	26,900,000

RAILWAY COMMITTEE OF THE PRIVY COUNCIL.

The report of the Secretary of the Railway Committee of the Privy Council enumerates the cases which have been before the committee during the twelve months from October 1, 1900, to October 1, 1901; within the period above named there were seven meetings of the Railway Committee, as follows :—

December 21, 1900.
March 7, 1901.
May 21, 1901.
May 27, 1901.
June 3, 1901.
September 5, 1901.
September 10, 1901.

The character of the business before them was :—

1st. For permission to make highway crossings over railways.

2nd. For permission for one railway to cross another.

3rd. For permission for one railway to form a junction with another.

4th. For permission for railways to cross and run along streets and highways.

5th. For approval of plan and proposed site of bridges over navigable waters.

6th. For permission to remove packing from frogs and wing rails.

7th. For permission to use crossings and junctions before installation of interlocking appliances.

8th. For permission to construct branch lines.

9th. For running powers by one railway over another railway.

10th. For protection at streets and highways crossed by railways.

11th. To compel railways to provide effective cattle guards at highway crossings.

12th. For permission to change location of sections of railways.

13th. For approval of rules and regulations of railways.

14th. For permission to close streets and highways and to divert them.

All evidence is taken down by a stenographer, and is placed on file in the department, as a record for future reference.

CANAL STATISTICS.

These statistics are for the season of 1900. They have been prepared by Mr. R. Devlin, the officer in charge of the Canal Statistic Office.

TABLE showing the number of tons of freight passing through each canal, the tolls collected, and the number of trips of vessels passing through each canal, for the year ended December 31, 1900.

Name of Canal.	Tons of freight passing through.	Tolls Collected.	Number of trips of vessels passing through.
		$ cts.	
Lachine Beauharnois Cornwall Williamsburg } St. Lawrence Canals	2,138,357	19,387 00	9,658
Welland	1,012,812	14,398 01	2,399
Chambly	300,755	3,128 63	2,839
Ste. Anne's Carillon Grenville } Ottawa River Canals	441,116	2,602 63	2,114
Rideau	191,515	1,681 36	2,579
Murray	213,179	263 34	745
Trent Valley	100,972	565 12	2,212
St. Peters	115,783	2,317 52	1,628
* Sault Ste. Marie	2,194,748	Free.	3,081

* This canal was opened for traffic September 9, 1895.

GENERAL REMARKS.

For details as regards the subjects treated in this report, I would refer you to the reports of the officers in charge of the Government Railways and Canals, which form appendices hereto.

The Summary of Tables of Steam Railways for the Years ended June 30, 1900, and June 30, 1901.

——	Comparative Statement.	
	June 30, 1900. Including 13 Electric Railways.	June 30, 1901. Steam Railways only.
	$	$
Miles of railway completed (track laid)	17,824	18,294
„ siding	2,558	2,710
„ iron rails in main line	130	110
„ steel „	17,694	18,184
„ „ „ (double track)	591	634
Capital paid (including the 4 following items)	998,268,404	1,042,785,539
Government (Dominion & Provincial) bonuses paid	169,706,725	177,640,765
„ „ loans paid	20,869,264	20,613,489
„ (Provincial only) subscriptions to shares paid	300,000	300,000
Municipal, aid paid	15,884,542	16,310,253
Miles in operation	17,657	18,140
Gross earnings	70,740,270	72,898,749
Working expenses	47,699,798	50,368,726
Net earnings	23,040,472	22,530,023
Passengers carried	21,500,175	18,385,722
Freight carried (tons)	35,946,183	36,999,371
Train mileage	55,177,871	53,349,394
Passengers killed	7	16
Number of elevators	239	253
„ guarded level crossings—public roads	169	193
„ unguarded level „ „	12,879	12,422
„ overhead bridges	431	427
„ of public roads under crossings	...	280
„ level crossings of other railways	244	233
„ junction with other railways	346	347
„ „ branch lines	251	230
„ engines owned	2,179	2,516
„ „ hired	103	117
„ sleepers and parlour cars owned	235	243
„ „ „ hired	3	15
„ first class cars owned	1,213	1,087
„ „ hired	74	72
„ second class and immigrant cars owned	640	636
„ „ „ hired	1	13
„ baggage, mail and express cars owned	632	729
„ „ „ hired	30	86
„ refrigerator cars owned	736	728
„ „ hired	207	273
„ cattle and box freight cars owned	39,112	42,166
„ „ „ hired	3,426	3,738
„ platform cars owned	14,947	15,773
„ „ hired	679	575
„ coal and dump cars owned	5,739	6,557
„ „ hired	133	218
„ conductors' vans owned	1,055	1,019
„ „ hired	1	21
„ tool cars owned	*872	948
„ „ hired	...	7
„ snow ploughs owned	300	301
„ „ hired	...	3
„ flangers owned	311	320
„ „ hired	...	3

Number of cars with air-brakes—owned	48,072
„ „ hired	4,342
Number of cars with automatic couplers—owned	56,423
„ „ hired	4,711

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*Including steam shovels, pile drivers, water tank cars, store cars, gravel cars, boarding cars, &c.

SUMMARY of Tables of Electric Railways for the year ended June 30, 1901.

Miles of railway completed (track laid)	675
" sidings	14
" iron rails in main line	5
" steel rails in main line	670
" steel rails (double track)	158
Capital paid, including Dominion bonuses, $60,800 (of which $38,400 was paid to the St. Catharines and Niagara Central Railway, afterwards changed to an electric road, under the name of the 'Niagara, St. Catharines and Toronto Railway,' and municipal aid, $173,000 (of which $100,000 was subscription to shares in and $40,000 loan to the St. Catharines and Niagara Central Railway)	$39,076,019
Miles in operation	672
Gross earnings	$ 5,768,283
Working expenses	$ 3,435,163
Net earnings	$ 2,333,120
Passengers carried	120,934,656
Freight carried (tons)	287,926
Car mileage	31,750,754
Passengers killed	3
Number of guarded level crossings, public roads	17
" unguarded level crossings, public roads	247
" overhead bridges	20
" level crossings of other railways	74
" junctions with other railways	24
" junctions with branch lines	8
Power-houses (water-power)	11
" (steam power)	30
Number of motor cars—owned	1,728
" motor cars—hired	8
" trailer cars—owned	291
" trailer cars—hired	2
" electric locomotives—owned	8
" electric locomotives—hired	1
" baggage, mail and express cars—owned	13
" cattle and box freight cars—owned	7

Number of platform cars—owned.	56
" tool cars—owned.	7
" snow ploughs—owned.	16
" snow sweepers—owned.	62

I have the honour to be, sir,
Your obedient servant,

COLLINGWOOD SCHREIBER,
Deputy Minister and Chief Engineer of Railways and Canals.

The Honourable A. G. Blair,
Minister of Railways and Canals.

No. 1

RAILWAYS.

INTERCOLONIAL RAILWAY OF CANADA,
OFFICE OF THE GENERAL MANAGER,
MONCTON, N.B., September 23, 1901.

SIR,—I have the honour to submit the following report on the working of the Intercolonial Railway during the fiscal year ended June 30, 1901:—

I inclose the report of the chief engineer on the works charged to capital account, the report of the general superintendent and of the engineer of maintenance on the repair and renewal of the permanent way, buildings and works, and the report of the mechanical superintendent on the rolling stock; also, the following statements of the accounts by the chief accountant and treasurer:—

No. 1. Capital Account.
2. Revenue Account.
3. Locomotive Power.
4. Car Expenses.
5. Maintenance of Way and Works.
6. Station Expenses.
7. General Charges.
8. Special Votes.
9. General Stores.
10. General Balance.
11. Comparative Statement of Averages.

The length of railway in operation during the year was the same as last year, 1,314·67 miles.

CAPITAL ACCOUNT.

The total cost of road and equipment on June 30, 1900, was $59,987,715.29.
The additions during the year were as follows:—

	$	cts.
To increase accommodation at Halifax .... $	16,151	06
Balance due on Halifax Cotton Factory Branch	5,801	97
To dredge and blast rock at Halifax	15,818	42
To extend Cotton Factory Branch at Halifax........	734	75
Freight shed and to improve station at Rockingham..	368	44
Iron highway bridge, Rocky Lake	4,911	00
Building for baggage and express at Truro	2,045	33
To re-arrange, enlarge and extend station yard at Truro....................................	9,498	84
To extend coal trestle at Stellarton	3,502	20
Sidings at Stellarton near Albion Mines	2,364	75

Improvements at Mulgrave	$ 41,524 51
To improve ferry service at Strait of Canso	317,844 01
Improvements at Point Tupper	7,105 01
Towards building sea-wall in Cape Breton	8,000 00
To increase accommodation at Sydney	96,000 00
To raise Sydney and Louisburg Railway Bridge	15 39
To increase station accommodation at Westville	8,000 00
To extend Intercolonial Railway to Copper Crown Works, Pictou	20,234 51
Land damages on Oxford and New Glasgow and Cape Breton Divisions	326 13
To increase accommodation at Amherst	4,132 67
Towards constructing subway at Christie's Crossing	6,252 42
To increase accommodation at St. John	203,000 00
Grain elevator at St. John	2,180 55
Additional conveyer on west side of wharf at St. John.	16,752 50
To increase accommodation at Lévis	90,090 23
To remove rock by widening Bennett's Cutting, &c., near Lévis	5,058 61
New steel bridge at Etchemin	20,116 23
To strengthen bridges	142,678 00
Building new and enlarging old engine houses	132,422 61
Larger turntables	10,994 98
Improving telegraph service	5,190 00
Steel rails and fastenings	402,549 71
Towards building rest houses at engine stations	2,998 06
Improved accommodation and facilities along the line of railway	146,486 27
To increase facilities along the line	92,099 53
Additional sidings along the line	114,992 82
To purchase tools and machinery	18,116 63
Machinery at shops	4,170 56
Three travelling steam derricks	34,500 00
To change air brakes on passenger cars, &c.	13,074 10
To apply air brakes to freight cars	25,485 18
To change car couplers on passenger cars	2,212 00
To change draw-bars on freight cars	20,000 00
To equip passenger cars with vestibules	5,472 06
To equip passenger cars with Pintsch gas apparatus	4,800 00
Additional rolling stock	1,563,705 77
Elevator at Halifax	807 03
Original construction	1,728 62
Total	$ 3,652,313 46
Making the total cost on June 30, 1901	63,640,028 75

To purchase tools and machinery.

This is for additional and improved tools and machinery for the machine shop.

Three travelling steam derricks.

These are for lifting heavy weights at wrecks and on other occasions.

To change air brakes on passenger cars, &c.

This is to apply the latest improved quick action air brake.

To apply air brakes to freight cars.

This is a continuation of work which has been going on for some years. The law in the United States requires that all freight cars shall be fitted with air brakes. These brakes were fitted on 1,307 cars during the year. There are now 3,978 of the freight cars so fitted.

To change car couplers on passenger cars.

This is a change made necessary by the action of all railways in North America adopting a particular kind of coupler called the master car builders' standard coupler. The Miller coupler, formerly in use, was removed from sixty cars during the year, and the M. C. B. coupler was applied in its place.

To change drawbars on freight cars.

This work has been going on for some time, as it is necessary in order to comply with the law in the United States, which requires all freight cars to be equipped with the M. C. B. coupler. Five hundred cars were fitted during the year.

To equip passenger cars with vestibules.

This is an improvement for through trains and adds to the comfort and safety of passengers.

To equip passenger cars with Pintsch gas apparatus.

This is the mode of lighting passenger cars which is in most general use, both in America and in Europe. It is found to be efficient, economical and safe.

Additional rolling stock.

A total of twenty locomotives were purchased, three of them being ten wheeled engines for passenger service, and seventeen being consolidation engines for freight service

Four first class sleeping cars, six first class passenger cars for day use, one thousand and forty-eight box freight cars, nineteen refrigerator freight cars were purchased.

Forty box freight cars and two platform cars were built in the railway workshop.

In regard to the other expenditures on capital account, the reports of the Chief Engineer, and of the Engineer of Maintenance, both of which are attached, give the particulars.

REVENUE ACCOUNT.

The gross earnings and the working expenses for the year compare as follows :—

Working expenses	$5,320,422 64
Gross earnings	4,972,235 87
Deficiency	$ 348,186 77

The gross earnings compare as follows with those of the previous year :—

In 1900-1901	$4,972,235 87
In 1899-1900	4,552,071 71
Increase	$ 420,164 16

The earnings from passenger traffic compare as follows :—

In 1900-1901	$1,607,166 79
In 1899-1900	1,404,469 87
Increase	$ 202,696 92

The earnings from freight traffic compare as follows :—

In 1900-1901	$3,121,006 15
In 1899-1900	2,912,790 52
Increase	$ 208,215 63

The earnings from mails and express freight compare as follows :—

In 1900-1901	$ 244,062 93
In 1899-1900	234,811 32
Increase	$ 9,251 61

The earnings by mile of railway compare as follows :—

In 1900-1901	$ 3,782 11
In 1899-1900	3,462 52
Increase	$ 319 59

The earnings by train mile compare as follows :—

	Cents.
In 1900-1901	79·39
In 1899-1900	83·16

The number of passengers carried compare as follows :—

In 1900-1901	2,025,295
In 1899-1900	1,791,754
Increase	233,541

Of this increase 226,741 were local passengers and 6,800 were through passengers.

The weight of freight carried compares as follows :—

	Tons.
In 1899-1900	2,151,208
In 1900-1901	2,111,310
Decrease	39,898

There was an increase in through freight of 40,359 tons and a decrease in local freight of 80,257 tons.

The following is a comparative statement of a few of the chief articles of freight, showing the quantity carried in this and in the previous year :—

Articles.	1899-1900.	1900-1901.	Increase.	Decrease.
Barrels of flour and meal	1,234,076	1,292,106	58,030	
Bushels of grain	2,720,453	3,535,364	814,911	
Lumber in superficial feet	379,350,074	396,858,964	17,508,890	
Head of live stock	92,813	95,923	3,110	
Coal in tons	603,209	506,590		96,619
Manufactured goods in tons	507,024	476,528		30,496
Cords of firewood	49,638	69,024	19,386	
All other articles in tons	296,341	289,519		6,822

There was an increase over last year in the quantity of the following articles carried :—Flour and meal, oats, wheat, corn, pease, beans, hay and straw, butter and cheese, horned cattle, pigs, sheep, lumber and timber, bricks, fish in barrels, dried fish, oysters, molasses, fresh pork, fresh and salted beef, hides and skins, and leather, and a decrease in the quantity of the following :—Barley, potatoes, carrots, beets and turnips, eggs, calves, horses, extract of hemlock bark, coal, ore, stone, lime and cement, sand, iron and other metals, fresh fish, canned fish, sugar, salted pork, drygoods, hardware, liquor, groceries.

WORKING EXPENSES.

The working expenses compare as follows with the previous year :—

In 1900-1901	$5,320,422 64
1899-1900	4,266,710 22
Increase	$1,053,712 42

The averages compare with those of last year, as follows :—

	Cents.
Per mile run by engines—	
In 1900-1901	67·26
1899-1900	62·49
Per mile run by trains—	
In 1900-1901	84·95
1899-1900	77·94

Expenditure per mile of railway—

In 1900-1901	$4,046 96
1899-1900	3,245 46

The rent paid to the Grand Trunk Railway Company is not included in the above, as it would disturb the comparison with previous years ; no corresponding charge relating to the cost of any portion of the railway having been included in the working expenses previous to March 1, 1898.

The permanent way and structures and all the works of the railway received necessary repairs, and are in good order.

The work of relaying the track with heavier rails, commenced last year, was continued, and on 31½ miles of track the rails, weighing 67 pounds to yard, were taken up, and new rails, weighing 80 pounds to the yard, were laid in their place.

The number of ties renewed was 495,243.

Portions of the track on various parts of the line were reballasted, 109,868 cubic yards of gravel being distributed over a total distance of 144 miles.

The bridges, wharfs and buildings received necessary repairs.

The fences were repaired, and 161 miles of new fences were built.

The snow fences and snow sheds were repaired.

The rolling stock received necessary repairs, and is in good order.

Six large ten-wheeled passenger locomotives were purchased to maintain the stock, replacing smaller ones taken out of service.

Two hundred platform cars were purchased, one box freight car, fifteen platform cars, six coal cars, and one auxiliary car were built in the railway shops, all to maintain the stock, a total of 223 cars.

These cars are of 60,000 pounds capacity, and replace cars of 30,000 pounds capacity.

STORES.

The value of stores purchased was	$3,433,823 22
The value of stores used was	3,145,526 01
The value of material sold was	222,943 15

The value of stores on hand at the end of the year was:—

Miscellaneous	$ 295,202 57
Fuel	543,382 00
Track materials	675,194 37
Iron and steel rails	311,198 10
Total	$1,824,977 04

The large iron works of the Dominion Iron and Steel Company at Sydney, referred to in last year's report, have been rapidly constructed, and are approaching completion. The first blast furnace was started February 2, 1901, and the second one on May 13.

A number of fires occurred during the year by which railway property was destroyed. On October 5, 1900, the engine-house, turntable and thirty tons of coal were burned at Sussex.

On December 10, 1900, a coal shed at Point Tupper was burned.

On January 23, 1901, the office furniture, books and papers of the Assistant General Freight Agent were burned in the fire which destroyed the Board of Trade Building, Montreal, in which he had his office.

On February 5, 1901, all the railway buildings at Trois Pistoles were burned. They were a combined station-house, freight-house and residence, and a building formerly used as a dining-hall and residence. I regret to record that in this fire an aged lady, a relative of the station master, lost her life, and that in the endeavour to rescue her, the Station Master, Mr. Joseph Hudon, sustained injuries from which he died twelve days afterwards, on February 17.

On February 10, a building at Ste. Flavie, used for delivering coal to locomotives was burned.

On April 27, 1901, 650 lineal feet of snow shed, near Kempt station were burned, and on June 20, 1901, 525 lineal feet of snow shed, near St. Arsene, were burned.

On June 14, 1901, the freight-house at Chaudière Junction, and forty-six freight cars, some of them containing freight, were burned.

A heavy gale and high tide caused great damage to the Courtenay Bay branch and ballast wharf at St. John on November 10, 1900.

The cost of clearing snow and ice was greater than in any previous year, amounting to $96,855.01.

Mr. E. Tiffin was appointed Traffic Manager, January 19, 1901, and he took charge of the Freight and Passenger Traffic Departments on January 21, 1901.

Mr. E. G. Russell was on February 23, 1901, appointed manager, having charge of the Mechanical Department, the station and train service and the maintenance of way and works, he did not, however, enter fully upon the discharge of his duties until June 1, 1901.

I have the honour to be, sir,
Your obedient servant,

D. POTTINGER,
General Manager, Government Railways.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Railways and Canals, Ottawa, Ont.

No. 1.—INTERCOLONIAL RAILWAY.

Dr. CAPITAL ACCOUNT, Year ended June 30, 1901. Cr.

1900.		$ cts.	$ cts.	1900.		$ cts.
June 30...	To Cost of Intercolonial Railway to date	60,006,192 18		June 30...	By Dominion of Canada	59,987,715 29
	Less refunds on account previous years Expenditures	18,476 89				
			59,987,715 29			
	Expenditure for current year :					
	Increased account at Sydney	96,000 00				
	" St. John	203,000 00				
	Additional rolling stock	1,563,705 77				
	Increased accommodation at Lévis	90,090 23				
	To strengthen iron bridges	142,678 00				
	Additional houses for engines	132,422 61				
	To complete subway at Christies' Brook at Amherst	6,252 42				
	Larger turn tables	10,994 98				
	To extend I.C.R. to Copper Crown Works, Pictou	20,234 51				
	Improvements at Point Tupper	7,105 01				
	Improved accommodation and facilities along the line	146,486 27				
	To increase facilities along the line	92,099 53				
	Machinery at shops	4,170 56				
	Improvements at Mulgrave	41,524 51				
	To change car couplers on Passenger cars	2,212 00				
	" purchase tools and machinery	18,116 63				
	Balance due on Halifax and Cotton Factory Branch	5,801 97				
	To increase accommodation at Halifax	16,151 06				
	" dredge and blast rock at Halifax	15,818 42				
	Improving telegraph service	5,190 00				
	Additional sidings along the line	114,992 82				
	To improve ferry service, Strait of Canso	317,844 01				
	Siding at Stellarton near Albion Mines	2,364 75				
	To increase accommodation at Amherst	4,132 67				
	" iron highway bridge at Rocky Lake	4,911 00				
	Grain elevator, St. John	2,180 55				
	Steel rails and fastenings	402,549 71				
	Towards building sea wall in Cape Breton	8,000 00				
	To increase station accommodation at Westville	8,000 00				
	Land and Damages on O. & N. G. and C. B. Divisions	326 13				
	To apply air brakes to freight cars	25,485 18				
	" extend Cotton Factory Branch Halifax	734 75				
	" re-arrange, enlarge and extend station yard, Truro	9,498 84				
	Building for baggage and Express at Truro	2,045 33				
	New steel bridge at Etchemin—Additional cost	20,116 23				
	Original construction	1,728 62				
	To extend coal trestle at Stellarton	3,502 20				

" raise Sydney and Louisburg railway bridge..........	15 39				
" change air brakes on passenger cars....................	13,074 10				
" change draw bars on freight cars	20,000 00				
Freight shed and to improve station at Rockingham.......	368 44				
To equip passenger cars with vestibules.......	5,472 06				
" equip passenger cars with Pintsch Gas...................	4,800 00				
" remove rock by widening Bennetts Cutting............	5,058 61				
Towards purchasing 3 traveling cranes....................	34,500 00				
" building rest houses at 9 Eng. Stations	2,998 06				
Additional conveyor on west side of wharf at St. John... .	16,752 50		1901.		
Elevator at Halifax.	807 03				
		3,652,313 46	June 30...	By Dominion of Canada.........	3,652,313 46
		63,640,028 75			63,640,028 75

E. & O. E.
Moncton, N.B., June 30, 1901.

T. WILLIAMS,
Chief Accountant and Treasurer.

No. 2.—INTERCOLONIAL RAILWAY.

Dr. Revenue Account, year ended June 30, 1901. Cr.

Previous Year.	Expenditure.		Year ended June 30, 1901.	Previous Year.	Earnings.	Year ended June 30, 1901,
$ cts.			$ cts.	$ cts.		$ cts.
1,385,069 90	Locomotive power, Abst.	No. 1.	1,970,937 70	1,404,469 87	Passenger traffic..	1,607,166 79
1,010,256 87	Car expenses	" 2.	1,134,291 72	2,912,790 52	Freight traffic ...	3,121,006 15
962,978 41	Maintenance way & works	" 3.	1,151,263 65	234,811 32	Mails and sundries	244.062 93
537,548 85	Station expenses	" 4.	627,872 94			
309,832 94	General charges	" 5.	372,139 21			
61,023 25	Car mileage		63,867 42			
4,266.710 22			5,320,422 64			
164,694 47	Rental of leased lines	" 6.	140,000 00			
4,431,404 69			5,460,422 64	4,552,071 71		4,972,235 87
120,667 02	By balance................		....	....	To balance......	488,186 77
4,552,071 71			5,460,422 64	4,552,071 71		5,460,422 64

E. and O. E.
Moncton, N.B., June 30, 1901.

T. WILLIAMS,
Chief Acct. and Treasurer.

No. 3.—INTERCOLONIAL RAILWAY.

Locomotive Power, Abstract No. 1.

Previous Year.	—	Year ended June 30, 1901.
$ cts.		$ cts.
16,755 60	Mech'l supt's salary, clerks, office and travelling expenses......	18,273 60
359,996 15	Wages of drivers, firemen and cleaners................	468,734 14
601,867 63	Fuel..	973,268 83
24,891 77	Oil, tallow and waste and small stores....	27,023 07
316,999 78	Repairs to engines, tenders and engine tools...............................	413,127 27
41,805 73	Water, including pump and tank repairs................................	38,755 52
22,753 24	Miscellaneous....	31,805 27
1,385,069 90		1,970,987 70

E. and O. E.
Moncton, N.B., June 30, 1901.

T. WILLIAMS,
Chief Acct. and Treasurer.

No. 4.—INTERCOLONIAL RAILWAY.

CAR EXPENSES, Abstract No. 2.

Previous Year.	—	Year ended June 30, 1901.
$ cts.		$ cts.
106,608 01	Repairs to passenger cars	128,222 68
27,563 80	Repairs to postal, express and baggage cars	31,493 24
338,202 78	Repairs to freight cars and vans	326,075 62
5,851 81	Repairs to snow plows and flangers	6,635 12
360,585 01	Wages of conductors, train baggage masters and braksmen	452,385 55
5,473 20	Oil and waste for packing	7,498 40
115,180 27	Small stores and fuel	123,215 22
50,791 99	Miscellaneous	58,765 89
$1,010,256 87		$1,134,291 72

E. and O. E.

MONCTON, N.B., June 30, 1901.

T. WILLIAMS,

Chief Acct. and Treasurer.

No. 5.—INTERCOLONIAL RAILWAY.

MAINTENANCE OF WAY AND WORKS, Abstract No. 3.

Previous Year.	—	Year ended June 30, 1901.
$ cts.		$ cts.
9,558 42	Engineer's salary, clerks, office and travelling expenses	10,242 75
505,534 75	Wages in repairing roadway, fences, semaphores including new sidings laid in.	612,571 94
35,565 81	Rails and fastenings including new sidings laid in	78,659 37
69,298 95	Ties	123,997 89
134,953 57	Timber, lumber etc., for repairs to bridges, cattle guards snow-sheds, fences etc	97,973 42
8,544 96	Repairs to wharfs	5,627 71
86,546 97	Repairs to buildings and platforms, including extensions and additions to same	100,081 60
19,776 01	Repairs to tools	22,374 23
88,873 51	Clearing snow and ice	96,855 01
4,325 46	Miscellaneous	2,879 73
$962,978 41		$1,151,26 65

E. and O. E.

MONCTON, N.B., June 30, 1901.

T. WILLIAMS,

Chief Acct. and Treasurer.

No. 6.—INTERCOLONIAL RAILWAY.

STATION EXPENSES, Abstract No. 4.

Previous Year.	—	Year ended June 30, 1901.
$ cts.		$ cts.
432,330 67	Salaries and wages of station masters, agents, clerks, telegraph operators, station baggage-masters, yard-masters, switchmen and labourers.. ..	506,866 40
105,218 18	Fuel, oil and light, stationery, tickets and other incidental expenses.......	121,006 54
537,548 85		627,872 94

E. and O. E.
MONCTON, N.B., June 30, 1901.

T. WILLIAMS,
Chief Acct. and Treasurer.

No. 7.—INTERCOLONIAL RAILWAY.

GENERAL CHARGES, Abstract No. 5.

Previous Year.	—	Year ended June 30, 1901.
$ cts.		$ cts.
122,136 64	General manager, manager, traffic manager, district superintendents, train despatchers, general freight agent, general passenger agents salaries, clerks, office and travelling expenses........	151,589 76
36,508 71	Chief accountant and treasurer, traffic auditor, paymaster, cashier's salaries, clerks, office and travelling expenses........	42,051 12
16,770 31	Damages to men, animals and goods........	17,928 62
40,296 64	Ferry service........	60,526 78
6,434 45	Telegraph expenses, not including pay to operators........	4,107 84
35,609 35	Miscellaneous, printing, advertising, &c........	39,290 08
52,076 84	Agency expenses........	56,328 35
		371,822 55
....	To pay J. J. Wallace and John M. Lyons........	316 66
309,832 94		372,139 21

E. and O. E.
MONCTON, N.B., June 30, 1901.

T. WILLIAMS,
Chief Acct. and Treasurer.

No. 8.—INTERCOLONIAL RAILWAY.

SPECIAL VOTES, Abstract No. 6.

Previous Year.	—	Year ended June 30, 1901.
$ cts.		$ cts.
140,000 00	Rent of Grand Trunk Railway—Chaudière Curve to Chaudière and Ste. Rosalie to Montreal, including the Victoria Bridge and terminals at Montreal........	140,000 00
24,694 47	Rent of Drummond County Railway—Chaudière to Ste. Rosalie and the Nicolet Branch........ Operated as part of the Intercolonial Railway.	....
164,694 47		140,000 00

E. and O. E.
MONCTON, N.B., June 30, 1901.

T. WILLIAMS,
Chief Acct. and Treasurer.

No. 9.—INTERCOLONIAL RAILWAY.

Dr. **General Stores Account**—Year ended June 30, 1901. Cr.

		$ cts.	$ cts.			$ cts.	$ cts.
1900.							
June 30....	To balance		971,054 60	June 30....	By Issues during year	3,145,526 01	
					Sales material, fuel, etc	46,703 22	
1901.					Sales old material	176,239 93	
							3,368,469 16
June 30....	To Purchases during year	3,433,823 22					
	Charges from other departments	618,464 54					
	Labour, etc	156,003 52			By balance :—		
	Staff pay rolls	14,100 32					
			4,222,391 60				
					Ordinary stores including fuel	1,440,924 44	
					Iron and steel rails and fastenings	384,052 60	
							1,824,977 04
			5,193,446 20				5,193,446 20

E. & O. E.
Moncton, N. B., June 30, 1901.

T. WILLIAMS,
Chief Accountant and Treasurer.

No. 10.—INTERCOLONIAL RAILWAY.

General Balance, Year ended June 30, 1901.

		$ cts.		$ cts.
To Cash		356 21	By Dominion of Canada	2,443,539 74
Stations		155,183 88	Suspense	3,513 50
General Stores—			Chatham Railway	07
Ordinary stores, including fuel	$1,440,924 44		Canadian Pacific Railway—traffic	24,105 99
Iron and steel rails and fastenings	384,052 60		Central Railway of New Brunswick	105 35
		1,824,977 04	Hamilton Bridge Works	138 98
Dept. Accounts—			Post Office Dept.	182 55
Militia and Defence	$ 3,531 35		Cumberland Railway and Coal Co	11 92
Marine and Fisheries	14 76		I. C. R. Employee's R. and I. A.	3 50
Agriculture	24,415 18			
		27,961 29		$2,471,601 60
Canadian Pacific Railway —rolling stock		22,446 90		
Canada Eastern Railway—traffic	$ 5,891 09			
" " general	6,134 97			
		12,026 06		
Canadian Pacific Railway—general	$ 14,831 61			
" " (N.B.D)—general	4,105 35			
		18,936 96		
Grand Trunk Railway—general		6,503 47		
Western Countries Railway—general	$ 15,893 35			
" " traffic	64 57			
		15,957 92		
Quebec Central Railway		3,853 57		
Caraquet Railway		1,552 94		
Dominion Atlantic Railway—general		618 19		
Atlantic and Lake Superior Railway		6,055 62		
N.B. and P.E.I. Railway		2 86		
Boston and Maine Railway		22 71		
Buctouche and Moncton Railway		77 22		
Tobique Valley Railway		2,739 25		
Grand Trunk Railway—traffic		10,419 70		
Canada Atlantic Railway		15 95		
Kent Northern Railway		5,861 84		
N.S. Central Railway		2 53		
New York Central and Hudson River Railway		975 80		
Imperial Tank Line		84 60		
National Despatch Line		23 12		
Restigouche and Western Railway		6 98		
Temiscouata Railway		298 66		
Prince Edward Island Railway		35 46		
Pennsylvania Railway		59 40		
Inverness and Richmond Railway		13,342 11		

Grand Trunk Railway—suspense	98	75
Central Vermont Railway	31	58
Wabash Railway	1	90
Drummond County Railway	7,259	87
Charlottetown Steam Navigation Company	87	91
Lotbinière and Megantic Railway	9	14
Newfoundland Railway	1,356	34
Salisbury and Harvey Railway	77	84
Michigan Central Railway	3	09
Phil. and Reading Railway		51
Pennsylvania Railway	62	77
York and Carleton Railway	15,788	84
Cin. H. and D. Railway	1	56
St. Martins and Upham Railway	74	00
Delaware and Hudson Railway	1	91
Sherbrooke Tank Line	5	99
Rutland Railway	1	68
Maine Central Railway	5	50
Merchants Despatch Trans Co		29
Lake Shore and Michigan Southern Railway	9	76
Erie Railway	1	79
Boston and Albany Railway	2	69
Elgin and Havelock Railway	9	50
Canada Atlantic and Plant Line	1	43
National Car Co	9	92
Missouri K. and T. Railway	1	22
Chicago, Milwaukee and St. Paul Railway	20	40
Shore Line Railway		76
Great Northern Railway Line	2	00
Cincinnati Northern Railway		65
Louisville E. and St. S. Railway	1	20
Chicago, Burlington and Quincy Railway		93
Cleveland, Cincinnati, Chicago and St. Louis Railway		98
Lehigh Valley Railway		54
Midland Railway of Nova Scotia	127	50
New York, N. H. and Hartford Railway		78
Unclaimed freight	360	70
Capital Suspense	222,839	47
Rents	4,972	09
Pullman Palace Car Co	8	00
Fraserville Foundry	304	29
Acadia Coal Co	21	26
Canada Coal and Railway Co	28	21
Intercolonial Coal Co	35	51
Dominion Coal Co	207	19
SS. *Admiral*	1,591	81
SS. *Verda*	50	78
SS. *Lake Ontario*	17	04
SS. *Assyria*	10	04
St. Francis Bridge Co	49	59

No. 10.—INTERCOLONIAL RAILWAY—*Continued.*

General Balance, Year ended June 30, 1901—*Continued.*

		$ cts.
To Western Union Telegraph Co.		368 73
Dominion Iron and Steel Co.		8,066 81
Municipality of Kings, N. B.		60 90
Baldwin Locomotive Works.		181 10
Canada Locomotive and Engine Co		4,972 04
Manchester Locomotive Works		389 70
Richmond Locomotive Works.		113 19
Barney and Smith Car Co.		1,895 90
Standard Car Truck Co		465 30
Portland R. Mills Co.		3,153 67
Nova Scotia Steel and Coal Co		3,307 19
Car *Victoria*		37 50
Great North-western Telegraph Co.		124 32
Allan SS. Line.		1,892 13
Union Bearing Co.		928 18
Elgin Branch Railway.		726 10
Polson Iron Works.		273 25
Town of Dartmouth.		32,000 90
St. John Street Railway.		31 00
Ontario Car and Foundry Co.		1,276 00
Springhill and P. Railway		3,161 99
Coldbrook Rolling Mills.		1,967 41
Halifax and C. B. Railway		1,151 42
Schooner *Mary Jane*		71 30
Incurrent and failed bank notes		77 20
Remittances destroyed		788 81
Stations:—		
Trois Pistoles	$ 97 37	
Nauwigewank	3 00	
Glengarry	5 00	
Bloomfield	25 21	
Coal Branch	65 84	
Weldford	55 00	
Ste. Luce	80 00	
Bic	22 00	
St. Arsène	107 12	
Dalhousie	19 69	
Valley	6 65	
Iona	72 71	
Isle Verte	25 00	
Kent Junction	28 38	
Gloucester Junction	78 87	
Campbellton (freight)	25 00	

Derby Junction	231 04			
Ste. Louise	66			
Nicolet	3 00			
Rivière du Loup (freight)	136 82			
St. Alexander	25 90			
Rivière du Loup (ticket)	16 00			
New Castle	102 75			
Red Pine	20 00			
Nappan	40 00			
Memramcook	7 54			
St. John (freight)	3,096 46			
Amherst (freight)	3 31			
Boisdale	7 80			
Sackville	10 17			
Wentworth	33 24			
Rockingham	27 47			
New Glasgow	633 90			
Halifax (freight)	887 49			
Nash's Creek	5 00			
Shediac	34 70			
Eureka Mills	13 56			
Athol	4 44			
		6,058 09		
Individual accounts		12,608 48		
Total		2,471,601 60	Total	2,471,601 60

E. & O. E.

MONCTON, N.B., June 30, 1901.

T. WILLIAMS,
Chief Accountant and Treasurer.

INTERCOLONIAL RAILWAY.

Individual Accounts, year ended June 30, 1901.

Dr.	$ cts.
Sessenwein Bros	1,507 84
Reid & Eastman	90 00
Gray & L. Bros Co.	6 75
F. E. Caine	2,760 70
M. J. O'Brien	419 21
H. A. McKeown	150 00
R. Colclough	12 85
W. K. Reynolds	31 19
W. A. Dube	81 99
Victor Pelletier	50 00
Geo. McDougall & Co	1,466 00
L. R. Harrison	1,343 41
Pickford &Black	134 22
I. N. Pouliot	352 20
R. A. & J. Stewart	41 39
J. Richards & Son	116 24
W. Ross	33 70
T. Cook & Son	19 80
P. E. Gallant	173 36
A. Forks	82 18
H. J. Cameron	1,679 07
J. J. McLeod	644 16
H. M. Hamilton	316 66
R. Hamilton	1,131 52
H. Atkinson	12 80
T. Atkinson	49 87
	12,707 11
Cr.	
Dube & Co	98 63
	12,608 48

INTERCOLONIAL RAILWAY.

Comparative Statement of Averages, year ended June 30, 1901.

——	1900.	1901.
Mileage of railway	1,314·67	1,314·67
Engine mileage	6,828,005	7,909,297
Train mileage	5,473,710	6,262,674
Car mileage	63,810,012	70,117,194
Receipts per engine mile ... Cents.	66·67	62·86
Receipts per mile of railway ... Dollars.	3,462 [illegible]	3,782 11
Percentage of passenger earnings to gross earnings	30·85	32·32
" freight " "	63·99	62·77
" other " "	5·16	4·91
Expenses per engine mile :—		
Drivers, firemen and cleaners' wages ... Cents.	5·27	5·93
Fuel ... "	8·81	12·31
Oil, tallow, waste and small stores ... "	·37	·34
Repairs to engines ... "	4·65	5·22
Water and tank repairs ... "	·61	·49
Miscellaneous ... "	·33	·40
Total	20·04	24·69
Mechanical superintendent's salary, office and travelling expenses	·25	·23
Total	20·29	24·92
Locomotive power per engine mile ... Cents.	20·29	24·92
Car expenses " ... "	14·80	14·34
Maintenance way and works per engine mile ... "	14·10	14·55
Station expenses " ... "	7·87	7·94
General charges " ... "	4·53	4·70
Car mileage " ... "	·90	·81
Total	62·49	67·26
Rental of leased lines	2·41	1·77
Total per engine mile	64·90	69 03
Locomotive power per train mile ... Cents.	25·30	31·47
Car expenses " ... "	18·46	18·11
Maintenance way and works per train mile ... "	17·59	18·38
Station expenses " ... "	9·82	10·03
General charges " ... "	5·66	5·94
Car mileage " ... "	1·11	1·02
Total	77·94	84·95
Rental of leased lines	3·01	2·24
Total per train mile	80·95	87·19
Working expenses per mile of railway :—		
Ordinary ... Dollars.	3,245 46	4,046 96
Rental of leased lines ... "	125 27	106 49
	3,370 73	4,153 45

E. and O. E.

MONCTON, N.B., June 30, 1901.

T. WILLIAMS,
Chief Acct. and Treasurer.

INTERCOLONIAL RAILWAY OF CANADA.

Office of the General Superintendent,
Moncton, September 21, 1901.

Sir,—I have the honour to submit the annual report on the maintenance of way and works for the year ended June 30, 1901.

I have the honour to be, sir,
Your obedient servant,
J. E. PRICE,
General Superintendent.

D. Pottinger, Esq.,
General Manager, Government Railways,
Moncton, N.B.

INTERCOLONIAL RAILWAY OF CANADA.

Office of the Engineer of Maintenance,
Moncton, N.B., September 21, 1901.

Sir,—I have the honour to submit the report of the maintenance of way and works department, for the year ending June 30, 1901.

TRACK.

During the year 123·47 miles of track laid with old 56-lb. rails, and 42·59 miles of track laid with old 67-lb. rails, were taken up and replaced with new 5-inch steel weighing 80 lbs. to the yard. Nine miles of 4-inch, 4¼-inch, 4½-inch old steel rails were taken out of track and replaced with other 4-inch, 4¼-inch and 4½-inch.

Sixteen and three-quarter miles of 4-inch and 4½-inch rails which were worn at the ends were cut and relaid.

Track from main line to Portage ballast pit, which was taken up last year was relaid.

TIES.

During the year 495,243 ordinary ties, and 305 sets of switch ties, were renewed.

BALLASTING.

One hundred and nine thousand eight hundred and sixty-three cubic yards of ballast were distributed and put under track on various parts of the line throughout the year. Between St. Flavie and Rivière du Loup, a good deal of track was lifted with ballast that had ben distributed in former years.

SEMAPHORES AND SWITCHES.

New distant semaphore signals were erected at the following stations :—St. John, Anagance (2), Moncton, Painsec, Amherst, Shubenacadie, Windsor Junction, Evans, Salt Springs, Richmond (2), Halifax, McIntyre's Lake, West Bay, North Sydney Junction, Coal Branch (2), Harcourt, Sacré Cœur (2), Cacouna, Rivière du Loup (2), Montmagny, St. Michel (2), St. Pierre.

The number of new switches put up on the various divisions during the year was as follows :—

Between Halifax and Stellarton	31
" Stellarton and Mulgrave	20
" Pictou and Oxford Junction	5
" Truro and Painsec Junction	27
" Point du Chene and St. John	27
And renewed wooden frames on	87
" Moncton and New Castle	3
" New Castle and Campbellton	2
" Campbellton and St. Flavie	10
" St. Flavie and Rivière du Loup	31
" Rivière du Loup and Lévis	22
" Chaudière and Ste. Rosalie	36
" Point Tupper and Sydney	42
Total switches renewed	256

New station telegraph signals were provided at the following stations :—Oxford Junction, Hopewell, Elmsdale, Scotch Hill, Malagash, Conn's Mills, McKinnon's Harbour, Shubenacadie, Pirate Harbour, Stellarton, Birch Ridge, Gallagher Ridge, Catamount, Adamsville, Acadiaville, Bartibogue, Beau Rivage, Sayabec, Kempt Station, Assametquaghan, Sacré Cœur, Trois Pistoles, St. Romuald.

Necessary repairs were made to all other semaphores, switches and station telegraph signals, throughout the line where required.

SIDINGS.

During the year 22⅞ miles of additional siding accommodation has been provided at different points throughout the line.

FENCING.

During the year 161 miles of Woven wire, Anchor wire, Page and Strathy fence, were erected at different points throughout the line. Repairs were made where necessary to existing fences.

SNOW SHEDS AND SNOW FENCES.

There was built during the year :—

	Feet.
Stationary snow fence, 8 feet	3,536
" 12 "	8,773
Portable snow fence	31,129

WHARFS AND TRESTLES.

At St. John, extensive repairs were made to ballast wharf, Courtenay Bay wharf. Built a new breakwater on Courtenay Bay wharf.

At Point du Chene, built a small breakwater; repairs were made to wharf.

At Halifax, repairs were made to wharfs; 74 creosoted piles were driven at pier No. 4, repairs were made to piers No. 2, piers Nos. 8 and 9 were blocked up where they had settled, and planking was repaired; repaired planking on piers Nos. 3, 4 and 5.

At Richmond, repairs were made to coal trestles.

At D. W. T., Halifax, repairs were made to coal trestle.

At Darmouth, 318 feet of cribwork was built.

At Motts, repaired trestle.

At Pictou Landing Wharf, necessary repairs were made.

At Pomquet, trestle was repaired.

At Maitland, repairs were made to crane and turntable, and renewed part of platform top.

At Mulgrave, necessary repairs made to wharf, and also to transfer ferry.

At Port Hastings, repairs were made to wharf.

At Kenedy's (east of), built new crib wharf.

At North Sydney, repairs were made to wharf.

At Beau Rivage (east of), a new crib wharf was built, and repairs made to crib wharf.

At Lévis, repairs were made to Princess pier, and repairs to crib work of wharf at Lévis yard.

At Rivière du Loup, repairs were made to coal trestle.

At Campbellton, repairs were made to coal trestle.

At St. Charles Junction, repairs were made to coal trestle.

BUILDINGS AND PLATFORMS.

At. St. John, slight repairs were made to government houses, renewed foundation under head house with stone, iron needles and concrete. A new floor was laid in the C. P. R. freight house, and repairs made to carpenter shop; also repairs made to wash-house.

At Challet, platform was extended 15 feet.

At Gondola Point, a new platform was built, 75 feet long by 8 feet wide.

At Hampton, a new platform was built around station.

At Penobsquis, passenger platform extended 70 feet, and repairs made to Station Master's office.

At Model Farm, passenger platform was rebuilt, and a new station built.

At Nauwigewauk, repairs were made to station.

At Sussex a new shed for engines was built.

At Anagance, repairs were made to station master's office.

At Norton, repairs were made to station master's office.

At Petitcodiac, necessary repairs were made to roof of station.

At Salisbury, repaired freight house floor.

At Moncton, repairs were made to government cottages where needed, and four new wood houses built; coal sheds repaired, a wooden sewer, 180 feet, was made from the old round-house; paint shop was repaired, Barton's shop was repaired, new floors laid and sides of building clapboarded, and machine shop was partly reshingled. A new Sparham roof was put on general office building.

At Painsec, passenger platform was repaired.

At Calhouns, flag station was repaired.

At Springhill, repairs were made to coal shed and car repairer's office.

At Belmont, platform was rebuilt and general repairs made to station.

At Debert, new sills put under the station, part of the roof reshingled, and general repairs made to building.

At Amherst, rebuilt a platform 450 feet by 9 feet ; freight house platform was also renewed.

At East Mines, passenger platform was repaired.

At Westchester, passenger platform was repaired.

At Greenville, passenger platform was repaired, a new cellar was built, and general repairs made to station building.

At Wentworth, repairs were made to platform, and also shingled one side of kitchen roof.

At Londonderry, roof of station was reshingled, and general repairs made to building.

At Thomson, general repairs were made to station.

At Fort Lawrence, loading platform, repaired and a new platform built 100 feet by 12 feet.

At Athol Station, a new cellar was provided.

At Evans, general repairs were made to station.

At Memramcook, repairs were made to freight house.

At Sackville, slight repairs were made to station.

At Maccann, slight repairs were made to station.

At Springhill Junction, slight repairs were made to station and repairs made to coal shed.

At Shubenacadie, repaired freight shed ; new sills, floor and joists were put in, passenger and freight platforms wer;e repaired. Also renewed box drain in yard.

At Truro, fitted up a box car for tool-house, repaired tannery building, which is now used as a storehouse, repaired round house walls and windows of the wooden addition ; also repaired floors, pit timbers, and roof, and put up a new smoke stack, made a new office for train despatcher, sheathed Superintendent's office and repaired floors, closets, &c.; made a new oil room in freight house for traffic department, converted car body into tool-house for section men. Put up new shelves for traffic department in Truro freight house. Put new floor in baggage room, and repaired toilet closet. Built chimney in tool-house, repaired drop doors of coal shed. Supports were placed under floor of bonded-room in freight house ; made partition between bonded-room and freight room. Repaired passenger platform. Repaired gents' closet, ladies' waiting room, and ticket office. Repairs were also made to freight house.

At Wellington, renewed floor of station office.

At Elmsdale, sheathed walls of kitchen, and made repairs to station.

At Stewiacke, renewed and extended platform.

At Salmon River Bridge built shed over pump.

At Hopewell, repaired freight house doors, reshingled part of roof of bark shed and repaired doors and windows ; repairs were also made to station.

At Milford, extended passenger platform ; a car body was also fitted up for tool house.

At Murrays, renewed platform.

At Brookfield, built new top on loading platform, put a new roof on tool house, built a new chimney on tool house ; station roof was also repaired.

At Windsor Junction, roof of water tank was repaired, repaired roof of station with metallic shingles.

At Fall River, platform was extended.

At Lakeview, repairs were made to platform.

At Bedford, roof of water tank was repaired, repaired roof of station and dwelling house.

At Lorne, renewed top and joists of platform.

At Riversdale, converted an old car body into tool-house.

At Shubenacadie, put new floor in tool house, and repaired scales.

At Halifax, necessary repairs were made to station, repairs were made to sheds on Piers Nos. 1, 2, 3 and 4, slight repairs were made to grain elevator building, and repairs made to cattle shed ; repairs were also made to dealers' platform.

Crossing platform and boat landing were removed and renewed, sills and part of floor under carpenter shop where renewed.

At Richmond, repairs were made to coal shed, and bulk head, built under trestle. Repairs were made to round-house, and an opening made in wall for engine pilot. Car shops were repaired. Machine shops were repaired. Metal fittings and sky lights of train shed were replaced. Necessary repairs were made to emigration building, and landing steps renewed, new lockers were built in sheds Nos. 2, 3, and 4. A new shanty for flagman was built at Young street crossing. Erected new automatic gates. Repairs were made to switchman's shanty. At D. A. R., freight shed adjoining walls were pointed. Floor was repaired and roof newly shingled where necessary. At Piers Nos. 1 and 2, repairs were made to platform and coal bins built, two chimneys were built and three stoves set up. Repairs were made to coal chute.

Pier No. 5, a car body was converted into an office for checkers.

Repairs were made to coal shed.

Repaired flooring of cattle shed.

Car body was fitted up for coal dealers.

North street station engine-room was repaired.

North street station platform was repaired.

Shed No. 3, D. W.T. supports were placed under floor beams.

Round-house, new pit, timbers were put in and floors repaired, also a new smoke-jack put up.

Roof of mechanical foreman's house was repaired.

Repairs were made to planking of pier No. 9, and piles driven.

At Pictou, station platform was repaired, freight shed doors and roof repaired. Repairs made to engine-house, baggage-room repaired and new ash-pit built.

At Brown's Point, a new platform was built.

At Scotch Hill, repairs were made to station and a new platform built.

At Scotsburn, repairs were made to station.

At Meadowville, repairs were made to station.

At River John, repairs were made to station, and freight-shed platform was also repaired.

At Denmark, repairs were made to station and a new platform built.

At Tatamagouche, repairs were made to station and freight-shed, and a new platform built.

At Malagash, repairs were made to station.

At Wallace, spouting and conductors were put around house.

At Wallace bridge, storm doors were put on station.

At Pugwash Junction, repairs were made to station.

At Pugwash, repairs were made to station and freight-shed.

At New Glasgow, repairs were made to station platform, freight-shed, baggage-room and office.

At Conn's Mills, new passenger platform built, new loading platform built, and repairs made to station building.

At Oxford, repairs were made to station platform.

At Westville, new house built for watchman.

At Burnside, built new power shed and built an addition to freight platform.

At Avondale, birch floor built in station, rebuilt cattle pen.

At Antigonish, repairs were made to station, a small building was built for agent and repairs made to freight-shed.

At Monastry, repairs were made to station, and repairs made to platform.

At Murphy's, repairs were made to platform and shelter.

At Tracadie, repairs were made to toilet closets and cattle pen.

At Stellarton, repairs were made to engine-house and freigh shed.

At Pirate Harbour, telegraph office was fitted up.

Brierly's Brook, repairs were made to station.

At Linwood, repairs were made to station.

At Piedmont, repairs were made to station.

At Harbour an Bouche, repairs made to toilet closet.

At Mulgrave, freight shed and engine shed were repaired, fitted up an office for engineers, and repaired cattle pen.

At Hawkesbury, hand-car shed built.

At McIntyre's Lake, new foundation and floor under waiting-room.

At Eden, built a new platform.

At Alba, built a new platform.

At Beaver Cove, built a new platform and shelter.

At Boisdale, built hand-car shed, and repaired platform.

At Shenacadie, repaired platform.

At West Bay, repaired platform.

At Orangedale, a tank was put under station.

At Scotch Lake, built new platform.

At Iona, built a new platform.

At Ottawa Brook, built new platform and shelter.

At North Sydney Junction, platform was extended.

At Sydney, new floor in express office, and built hand-car house.

At North Sydney Wharf, built a toilet closet and extended platform.

At Acadiaville, coal shed and platform repaired.

At Coal Branch, repairs made to platform.

At Harcourt, repaired agent's house and station platform.

At Catamount, repairs made to shelter and platform.

At Canaan, repaired hand-car house and loading platform.

At Trout Brook, repairs made to platform.

At Rogersville, repairs made to freight house.

At Kent Junction, repairs made to platform and station.

At Barnaby River, repairs made to station and platform.

At Gallagher Ridge, repairs made to shelter.

At Derby Junction, repairs made to platform, and storm doors put on station.

At Berry's Mills, repairs made to section foreman's house, and repairs made to platform.

At Chatham Junction, built a platform and express baggage room.

At Millerton, repairs made to station and platform.

At Bryenton, repairs made to platform and cellar.

At Newcastle, repairs made to roundhouse, repaired station building and platform, also repaired freight house platform.

At Gloucester Junction, repaired coal shed, station and platform.

At Petite Roche, repairs made to station.

At Belledune, repairs made to station.

At Bathurst, coal shed roof repaired.

At Jaquet River, repaired roof of coal shed and repaired station.

At Dalhousie Junction, repaired freight shed floor, general repairs made to station, foundation of tank house repaired, and renewed platform.

At Ulticans Siding, built new platform.

At Hodgins Siding, repaired passenger shelter and platform.

At Laughlin's Siding, repairs made to platform.

At Culligan's Siding, renewed platform.

At Charlo, built new porch to dwelling, put new floor in one room, and repaired freight house doors.

At New Mills, repaired pantry in station.

At Campbellton, freight shed reshingled, general repairs to freight shed platform, repaired roof of storehouse, and repaired coal boxes, fitted up old store room as a rest room for brakeman, repaired engine house and coal shed, and fitted up store room in engine house, and also put smoke jack on engine house.

At Moffatt's, made repairs to platform, moved old station and freight shed.

At Flat Lands, built new platform and freight shed, made old freight shed into a waiting room and agent's office, repaired toilet closet, and put water into station; also put double windows on agent's office.

At Metapedia, repairs were made to snow shed, repaired windows and doors, built new station platform, and built new platform to freight house.

At Millstream, built an addition to section foreman's house and rebuilt coal shed.

At Assametquaghan, rebuilt coal shed and put windows in foreman's house.

At Amqui, repairs made to platform.

At Cedar Hall, built pump house, repaired section foreman's house, and converted old freight shed into baggage room.

At Sayabec, general repairs made to station, removed old turntable and replaced it with one from Campbellton.

At St. Moise, repaired roof of station, built new kitchen for agent, converted old baggage room into dwelling rooms for agent, built new platform ; also removed coal shed and toilet closet and rebuilt them.

At Kempt, repairs made to station, and built a new toilet closet.

At Causapscal, repairs made to foreman's house.

At Beau Rivage, repairs made to station, built new toilet closet.

At Sacré Cœur, repairs made to station.

At Rimouski, repairs made to station and baggage room.

At St. Flavie, repairs made to station and coal shed and station platform.

At Cacouna, repairs made to station platform.

At Rivière du Loup, repaired coal shed, round house mechanical shops, freight shed, ice house and baggage room ; repairs were also made to platform.

At Trois Pistoles, repairs made to station and platform.

At St. Joseph, repairs made to station and toilet closet.

At Old Lake Road, built freight platform, repaired toilet closet, built new coal shed, put railing around platform.

At St. Helene, repaired station and put railing around platform.

At St. Phillip de Neri, moved old freight shed to rear of station, and converted it into a kitchen, built toilet closet and small coal shed, extended station platform.

At Ste. Anne, took down old wood shed, and repaired coal shed and cattle pen.

At St. Jean Port Joli, converted old station into freight shed, built toilet closet, repaired cattle pen, and extended station platform.

At St. Louise, laid kitchen floor.

At Rivière Ouelle, rebuilt cattle pen.

At St. Michel, built new tool house for section men, and put railing around platform.

At St. Valier, extended station platform, and made repairs to waiting room.

At St. François, repaired station and freight room.

At St. Pierre, repaired station and pump house.

At Montmagny, took down old loading platform, and repaired station platform.

At Harlake Junction, rebuilt station foundation and renewed platform.

At Hadlow, made repairs to despatcher's office and waiting room, tool house for section men was repaired, repaired switchman's shanty, and lengthened coal shed, and put in new coal chute, also repaired round house roof.

At St. Romuald, moved section man's house and converted it into a freight shed. Moved old station to St. Jean Chrysostôme.

At St. Charles Junction, repairs made to coal trestle and coal shed, extended station platform, built new sectionman's tool house, and new sidewalk.

At Chaudière Curve, repairs made to government house and ice house.

At Chaudière Junction, built new freight shed platform.

At St. Jean Chrysostôme, rebuilt station platform, put floor in station, rebuilt chimney and built toilet closet.

At Lévis, extended station platform, made repairs to Superintendent's house, repaired sectionman's house and baggage-room.

At Point Lévis, repaired coal shed and station platform, built new wood shed on dwelling houses, and made necessary repairs to dwellings.

At St. Nicholas, sheathed two waiting-rooms and office.

At Laurier, sheathed two waiting-rooms and office.

At Kingsburg, built woodshed and toilet closet, and extended station platform.

At Forestdale, sheathed two waiting rooms and office, and two rooms in dwelling house.

At Aston Junction, extended platform, sheathed two walls and office.

At St. Leonard, sheathed one waiting room and office, and built toilet closet.

At Mitchell, sheathed one waiting room and office.

At Carmel, station clapboarded and reshingled.

At Nicolet, repairs made to engine house.

At St. Eugene, repairs made to freight shed and built platform, moved old station and toilet closet.

At Bagot, moved old station and repaired it, changed platform, and repaired freight shed.

At Drummondville, repaired baggage room, blacksmith shop and engine house.

At St. Germaine, new cattle yard made, built new station platform, and repaired freight shed.

At St. Cyrille, made new cattle yard.

PAINTING.

	Square yard
At Bloomfield station	1,744
Norton station	3,932
Grenville station	1,368
Londonderry station	2,536
Belmont station	1,854
Wentworth station	2,636
DeBert station	1,505
East Mines station	1,535
Pugwash Junction	2,203
Wallace Bridge station	1,256
Wallace station	3,281
Tatamagouche station	3,526
Malagash station	2,379
Scotsburn station	2,881
Scotch Hill station	1,787
Elmsdale station	1,021
Conn's Mills station	1,376
Oxford station	3,936
River John station	3,398
Meadowville station	1,012
Denmark station	2,347
Pictou station	245

	Square yards.
Sylvester station	1,113
Fall River station and watchman's shanty, Halifax	297
Boisdale station, inside	163
North Sydney engine-house	936
Beaver Brook station	1,851
Bathurst station	926
Gloucester Junction station	978
Gloucester station	1,879
Belledune station	885
Jacquet River station	927
Campbellton freight-house	900
Petite Roche station	1,100
St. Jean Port Joli, freight-house	450
Rimouski station	1,358
Trois Pistoles station	3,139
Isle Verte station	679
River Sauvage station	966
Millstream, sectionman's house	265
Causapscal, sectionman's house	265
Little Metis station	1,667
Cedar Hall station	1,740
Metapedia station	194
St. Michel station	1,269
St. Nicholas station	1,868
Laurier station	2,083
Nicolet station	888
Drummondville station buildings	3,893

BRIDGES AND CULVERTS.

Between St. John and Point du Chêne, repaired Jardine wooden bridge, built a small wooden bridge at Portage, ballast pit, repaired six arch culverts and four square culverts.

Put a new standard hard pine top on Moose Horne bridge, repaired Cook's Brook bridge, repaired small wooden bridge at Point du Chêne.

At Sackville, one new cattle guard was built and one repaired, also repaired abutments of bridge.

At Aulac, repaired a cattle guard.

At Onslow, built a cattle guard.

At Fort Lawrence, covered overhead bridge.

At Kiellor's Brook, covered bridge with hard pine ties.

At Gilbert's, built new wooden culvert.

At Salt Springs, repaired culvert.

At Athol, built a new wooden sluice.

At Debert, covered steel bridge with hard pine ties.

At Cameron Brook, an arch culvert was repaired.

Between Springhill Junction and Athol, two open culverts and one arch culvert, were repaired.

Between Wentworth and Folleigh, the masonry at Girder bridge and two culverts were repaired.

Between Wentworth and Greenville, three arch culverts were repaired, and one pipe culvert headed.

Between Calhoun's and Memramcook, lengthened two culverts, and put in four bridge seats .

At Painsec, repaired a cattle guard and lengthened an open culvert.

At Truro, renewed steps and covering of overhead bridge.

At Leper Brook, repaired tops and bridge seats.

At Mt. Thom Siding, built new bridge and renewed wooden culvert.

At Sandy Cove, excavated for masonry, put in 28 feet of 24-inch pipe, built 12 feet of masonry at upper end of culvert, and two retaining walls 8 feet long, 4 feet high.

At Elmsdale, built box culvert 40 feet long, 5 feet by 3 feet opening.

At Hilden (½ mile west of), put two new bridge seats in beam bridge.

At Lydia Brook, repaired wing walls.

At Stewiacke, rebuilt a 30-foot stone culvert.

At Stellarton, repaired beam culvert and built wing walls.

Near Graham's Siding, pointed masonry of culvert.

At West River Station (2½ miles east of), built walls at each end of culvert.

Near Valley Station, repaired pipe culvert and made repairs to wooden culvert.

At Windsor Junction (west of), made excavation and rebuilt 12 feet of masonry on east end of box culvert.

At Fall River Station, excavated and rebuilt 16 feet of masonry, on one end of culvert, and 10 feet on the other end.

At Richmond Cattle Shed, repaired culvert at sewer, extended wooden culvert, built new culvert at new siding, and repaired overhead bridge; also repaired cattle guards.

At Bedford Bridge, put new covering on top of ties over abutments.

At Halifax, renewed all woodwork of long culvert on upper level of North street yard, repaired culvert on lower level, excavated for and laid culvert over suction pipe, D. W. T.

At Pictou, all escapes on Harbour bridge were repaired, piles examined and new culvert put in at tank.

At Hamlin's Siding, a new beam culvert was built.

At Sylvester Station (east of), new culvert built and new hard pine deck put on; 1½ miles east of Sylvester a new beam culvert was built.

Near Stellarton, new beam culvert built, one culvert repaired, and an extension built on another.

At Scotch Hill, hard pine stringers put in cattle guard, and beam culvert decked with hard pine.

At Scotsburn, hard pine stringers put in cattle guard, and beam culvert decked with hard pine.

At Meadowville, new hard pine stringers put in cattle guard, and beam culvert decked with hard pine.

At River John, new hard pine stringers put in cattle guard, and repairs made with flatted cedar.

At Denmark, repairs made to cattle guards and culverts.

At Tatamagouche, beam culvert repaired.

At Conn's Mills, cattle guards and culverts repaired.

At Westville, cattle guards and culverts repaired.

At Bear Brook, beam culvert repaired.

At Pomquet, new cedar culvert built.

At Stewart's Brook, repaired beam culvert

At Gillis Cove, built new culvert.

At Avondale, cattle guards repaired.

At Piedmont, repairs made to cattle guard and box culvert.

At Merigomish, cattle guards repaired.

At Mulgrave, cattle guards repaired.

At Tracadie, cattle guards repaired.

At Pine Tree, repairs made to bridge.

At Woodburn, repairs made to cattle guard.

At New Glasgow, repairs made to cattle guard, masonry of abutments and pier of East River bridge were pointed, and also masonry of two iron spans in New Glasgow yard repaired. A new box culvert 51 feet long, was built east of New Glasgow.

At Afton, repairs made to cattle guard.

At Barney's River, repairs made to cattle guard.

At Marshy Hope, repairs made to cattle guard and bridge.

At Brierly's Brook, beam culvert repaired.

At James River, cattle guard repaired.

At Sutherland River, bridge masonry pointed.

At West Merigomish, walls of beam culvert pointed, and abutments of little bridge pointed.

At French River, masonry of abutments pointed.

At Dewar and Barney's River, masonry of bridge pointed.

At Cape Porcupine, new culvert built.

At Leitche's Creek (east of Stellarton), culvert built.

At Piper's Crossing, new top put on culvert.

At McKinnon's Harbour, new top put on culvert.

Between North Sydney Junction and Georges River, two cattle guards built and two culverts retopped.

Between Leitche's Creek and North Sydney Junction, three culverts retopped.

Between Sydney and North Sydney Junction, one culvert retopped and one cattle guard built.

At Orangedale (½ mile west of), one cedar culvert built.

At Orangedale, one cattle guard built, and two cedar culverts built.

At River Denys (one mile west of), one cedar culvert built.

At Ottawa Brook, one culvert built of cedar.

Between McKinnon's Harbour and Iona, six culverts built of cedar.

At Martin's Crossing, rebuilt culvert.

At Shenacadie, one culvert built.

At Boisdale (east of), one culvert built.

At McIntyre's Lake, two cattle guards built.

At Cleveland Crossing, two cattle guards built.

Between West Bay Road and River Denys, six cattle guards built.

Between Sydney and Leitche's Creek, two cattle guards built.

At Parker's, Indiantown Branch No. 1, culvert repaired, both ends of masonry taken down and rebuilt, one end of No. 2 culvert was repaired, a concrete bottom was put in No. 3 culvert; at Wilson's, No. 4 culvert, ends of masonry taken down and rebuilt.

At Vanderback's, No. 5 culvert was taken down and rebuilt, No. 6 culvert was taken down and rebuilt, No. 7 culvert was pointed with cement, No. 8 culvert was repaired with rough stone, Nos. 9 and 10 culverts were rebuilt, one end each of No. 10 and 12 culverts were pointed with cement, necessary repairs were made to all cattle guards.

At Acadiaville, culvert was repaired.

At Harcourt, repairs were made to culvert.

At Newcastle, 'Y' repairs were made to culvert.

At Rogersville, repairs were made to cattle guards.

At South-west Miramichi, repairs were made to bridge and masonry pointed above low water mark.

At North-west Miramichi, repairs were made to bridges and masonry, pointed with cement above low water mark.

At Wilson's (Indiantown branch), repairs were made to bridge.

Between Jacquet river and Black Point, renewed three cattle guards, and repaired three cattle guards.

Between Dickie's siding and Black lands siding, renewed fourteen cattle guards.

Between Black lands siding and Charlo, renewed three cattle guards, and repaired three cattle guards.

Between Charlo and Dalhousie, renewed four cattle guards.

Between Dalhousie and Connors, repaired one cattle guard and one culvert.

Between Connors and Campbellton, necessary repairs made to three cattle guards, and one culvert repaired.

Between Millstream and Bourdeau, one culvert was retopped.

Between Dickie's siding and Black lands, repairs made to two culverts.

Dalhousie branch, four culverts were extended.

At Bathurst, necessary repairs made to overhead bridge.

At Charlo, built breakwater at bridge 80 feet long, and necessary repairs made to overhead bridge.

At Nepisiquit, necessary repairs were made to Black's overhead bridge.

At Eel river, rebuilt highway bridge at station, masonry on bridge was repointed, and two top stones reset.

At New Mills, Benjamin's, Dickie's and Morton's, race-way bridges were repointed, repointed masonry of two large arch culverts and ten small culverts.

Between Jacquet river and Black point, pointed masonry on Nashe's creek and Jacquet river, bridges, and also on five small culverts, and one arch culvert.

Between Gloucester and Beresford, pointed one arch culvert and seven small culverts.

Between Millstream and Bourdeau crossing, repointed masonry of inside of one end of each culvert, repointed masonry, Grant's bridge, and Millstream bridge, repointed masonry five beam culverts, and renewed seven.

Between Millstream and Middle river, repaired double box culvert and repointed both ends, made necessary repairs and repointed three box culverts, and also three double box culverts, also repointed one arch culvert and two box culverts.

At Kenny's overhead bridge made general repairs, built retaining walls between two piers, repointed four piers.

Between Red Pine and Bartibogue, repaired small box culvert, repointed two box culverts, and made necessary repairs to one culvert.

At Causapscal bridge, repointed masonry.

At Indian Brook bridge, repointed masonry.

At Amqui bridge, repointed masonry.

Between Fraser's and Kane's Brook, made necessary repairs to all culverts.

Betwene Kane's Brook and Millstream, made necessary repairs to all culverts.

Between Millstream and Assametquaghan, made necessary repairs to all culverts, and repaired Millstream bridge.

Between Assametquaghan and Beau Rivage, made necessary repairs to all culverts.

Between Beau Rivage and Metapedia river, made necessary repairs to all bridges and culverts, and put new top on Beau Rivage bridge.

Between Metapedia river and Causapscal, made necessary repairs to all culverts.

Between Salmon lake and Amqui, made necessary repairs to all bridges and culverts where necessary, general repairs made to Amqui bridge.

Between Amqui and McGregor's siding, made necessary repairs to all bridges and culverts.

Between McGregor's siding and Metapedia road, made necessary repairs to all bridges and culverts.

Between Metapedia road and Tortague river, made necessary repairs to all bridges and culverts.

Between Causapscal and Salmon lake, built two new cattle guards.

Between Price's mill and Metapedia road, built two new cattle guards.

At Adam's bridge, repaired wash-out.

At Ste. Luce, repairs made to culvert.

At Isle Verte, repairs made to culvert.

At St. Simon, repaired two culverts.

At Rimouski, repaired culverts and made necessary repairs to bridge.

At Trois Pistoles, necessary repairs made to bridge and culvert.

At Sacré Cœur, repairs made to culvert.

At St. Eloi, repairs made to culvert.

At St. Fabien, repairs made to culvert.

At St. Anaclet, repairs made to culvert.

At Breakey's brook, took down and rebuilt culvert.

At Bennet's, repairs made to culvert.

At Trois Saumons, necessary repairs made to bridge.

At St. Valier, renewed one cedar box culvert.

At L'Islet, took down one side of culvert, rebuilt and widened it.

At St. Jean, Port Joli, renewed twenty-four bridge ties and two cattle guard stringers.

At Ste. Louise, renewed four cattle guards, stringers and replaced twenty ties.

At Ste. Anne, replaced twenty-eight bridge ties and renewed two stringers, and repaired cattle guard.

At Rivere Ouelle, rebuilt one cedar beam culvert, and replaced two stringers on cattle guard at King's siding.

At St. Philippe, repaired one beam culvert.

At St. Paschal, put twenty-two ties on bridge.

At Kamouraska, put twenty-two ties on bridge and repaired beam culvert.

At Ste. Hélène, made one new cedar box culvert and one beam culvert.

At Alexander, repairs made to culvert.

At Rivière du Loup, two stone culverts repaired.

At St. François, repaired three stone culverts.

At St. Pierre, repaired two stone culverts.

At Montmagny, repaired ice fenders.

Drummond County division, fourteen culverts renewed and covered with cedar, eight open culverts renewed, with cedar, one open culvert built with cedar.

At Lawlor's farm, ditch timbered up with cedar on both sides, 375 feet long and 3 feet deep.

Painting.

The following bridges were overhauled, scraped and painted :—

Scadouc river bridge	4	spans.
Hall's creek bridge	2	"
Mountain road bridge	3	"
Palmer pond bridge	1	"
" " (overhead) bridge	1	truss.
North West Miriamichi bridge		span.
Salmon river bridge	2	spans.
Musquash bridge	1	"
Moose Horn bridge	1	"
Passakeag bridge	1	"
South West Miramichi bridge	6	"
Nappan bridge	1	"
Barnaby river bridge	1	"
North river bridge	2	"
Belmont bridge	2	"
Salmon river bridge	3	"

Stewart's bridge	3	plate girder.
Mud creek bridge	2	“
Charlo river (south branch) bridge	3	spans.
“ (north branch) bridge	2	“
Eel river bridge, lattice	3	“
Campbellton bridge, lattice	3	“
Belledune bridge, lattice	2	“
Nashe's creek bridge, lattice	1	“
Dickie's bridge	1	“
Benjamin river bridge (deck plate girder)	3	“
New Mills bridge	2	“
Elm Tree bridge	1	“
“ (overhead public road) bridge (two approaches).	1	“
Truro Y (through town) bridge.		
Tatagouche bridge	5	“
Bartibogue (lattice deck truss bridge)	1	“
Grant's brook (lattice deck truss bridge)	1	“
Millstream (deck truss) bridge	1	“
Nigadoo (deck truss) bridge	1	“
West Ste. Hélène station bridge, 4 plate girder span.		
“ Old Lake road bridge, 4 plate girder span.		
“ St. Philippe de Neri bridge, 4 plate girder span.		
East Trois Saumon bridge, 4 plate girder span.		
Amqui (lattice truss) bridge.		
Metapedia bridge	5	spans.
West of Amqui bridge (through truss span).		
St. Charles river bridge	4	“
St. Lenard's bridge	15	“
St. Henri bridge (through truss)	1	span.
Rivière du Chêne bridge	1	“
Moose Park bridge	1	“
Isle Verte bridge	2	spans.
Trois Pistoles bridge	5	“
Scotsburn (No. 1 old rail) bridge.		
“ (No. 2 old rail).		
East of Scotsburn (old rail) bridge.		
River John bridge	3	“
East of Malagash bridge	3	plate girder.
“ bridge	1	“
Malagash bridge	1	“
Tatamagouche bridge	1	span.
Wallace draw bridge	6	spans.

GENERAL.

Considerable work was done on the road leading from public road to the station at Rothsay.

The roads leading to freight-house at Sussex, Norton and Apohaque were also repaired.

The road leading to Dorchester wharf was repaired.

The Etter Aboisdeau and sluice, at Aulac, were repaired.

New buffers were put up at different places on the line, and necessary repairs made to others.

At North street station, Halifax, an Ellis patent buffer was put up. Excavation was made, foundation laid and a new Gantry put up at Halifax, D.W.T.

New sign boards were made and put up at different stations throughout the line where needed, old sign boards were repainted where necessary.

During the year a large number of farm crossing gates were renewed throughout the line and repairs made to others where necessary. Mail bag-catchers were put up at Cecile road and Sylvian Valley Mills.

The following works chargeable to capital account were carried out by the maintenance department.

At St. John, removed 288 cars of stone and clay to make foundation for new freight shed and siding, also extended loading platform 150 feet x 5 feet with top timbers, also supplied 110 cars of ballast, and built new freight shed 315 feet x 45 feet with 'L' 35 feet x 45 feet.

At Sussex, built loading platform 100 feet x 16 feet, covered with 4-inch deals.

At Norton, built a toilet closet.

At Penobsquis, made an addition to station of 14 feet and extended loading platform 100 feet.

At Boundary creek, a loading platform was built 346 feet x 5 feet high, filled with stone.

At Truro, renewed and extended platform at No. 9 siding.

At Pugwash, a new platform was built.

At Westchester, built a new cattle pen.

At Richmond, built crib-work for turntable track, erected turntable and strengthened culvert.

At Mulgrave, built new boiler-house.

At Point Tupper, built new boiler-house.

At Adamsville, improvements were made to station and loading platform built.

At Derby Junction, an extension was built to station.

At New Castle, an extension was built to coal shed.

At Mines road, built a new kitchen.

At Taylor's road, a shelter was built.

At Dalhousie Junction, passenger platform was extended.

At Nigadoo, Beresford and Green Point, combined stations and freight sheds were built 40 feet x 20 feet.

At St. Alexis, excavated and prepared the foundation for station.

At Sayabec, removed old turntable, and placed the old turntable which was taken from Campbellton.

At Rivière du Loup, made improvements to despatcher's office.

At St. Apollinaire, a station was built 26 feet x 40 feet, with 'L' 16 feet x 18 feet.

At Maddington Falls, a station was built 26 feet x 40 feet, with 'L' 16 feet x 18 feet.

At St. Wenceslas, a station was built 17 feet x 34, with 'L' 17 feet x 27 feet.

At St. Eugène, a station was built 26 feet x 40 feet, with 'L' 16 feet x 18 feet.

At St. Germain, a station was built 26 feet x 40 feet, with 'L' 16 feet x 18 feet.

At Bagot, a station was built 26 feet x 40 feet, with 'L' 16 feet x 18 feet.

At St. Cyrille, a station was built 26 feet x 40 feet, with 'L' 16 feet x 18 feet.

At River du Chêne, a station was built 17 feet x 34½ feet, with 'L' 17 feet x 27 feet.

At St. Nicholas, a dwelling was built 25 feet x 31 feet.

Copper Crown Co.'s road was repaired and extended.

SNOW FENCE BUILT.

	Feet.
Stationary, 8 feet	3,536
" 12 feet	8,773
Portable	31,129

SIDINGS.

	New. Feet.	Extension. Feet.
At St. John—		
Cross over from No. 2, to No. 3 long wharf....	108	
No. 5 ballast wharf....	762	
No. 5 “	850	
Cross over main line to creek	159	
Peters's tannery	393	
Outside island....	1,400	
Scot & Lawtons	.....	200
No 2, to No. 5 track....	285	
Lawlor's lake	271	
Moncton	362½	
Irishtown road .		
Calhouns	.....	1,000
Dorchester penitentiary	450	
Upper Dorchester	.....	1,000
Sackville	.....	1,000
Amherst	1,200	
Maccan	169	
Onslow....	.....	150
Mulgrave	687	
Westchester	747	
Brown's Point	950	
Cape Porcupine....	788	
Pirate Harbour....	2,958	
Mulgrave (2 miles west of)....	662	
Jefferson (5½ miles west of)....	1,200	
Orangedale	383	
River Denys (1 mile east of)	250	
Estmere	616	
“	180	
Alba.		
George's river	1,019	
East Mines	1,280	
“	.....	1,000
Boisdale	700	
Bear Brook	463	
Wellington	.....	756
Shubenacadie	500	
Chisholms	.....	204
Stellarton round house	332	
Dartmouth	1,902	
Newcastle 'Y'	1,450	
Dalhousie Junction	1,267	
“ branch track	.....	2,825
“	234	
Campbellton	.....	568
“	.....	855
“	.....	296
Ste. Flavie....	2,118	
“	.....	750
Thiberges	.....	914
St. Moise spur	.....	201
“	1,080	

	New. Feet.	Extension. Feet.
Sacré Cœur	.....	201
Ste. Luce ballast pit	293	
“ “	813	
St. Anaclet	362	
Cacouna	576	
“	1,300	
Rivière du Loup (east of bridge)	2,011	
“ (west of coal house)	2,324	
“ (round house)	284	
“ (west of machine shop)	230	
“	.....	235
“ (east of)	960	
St. Eloi	564	
St. Jean Port Joli	458	
Ste. Anne	404	
St. Philippe de Neri	550	
L'Islet	1,166	
Montmagny	240	
“	800	
St. Vallière	489	
St. Charles Junction	878	
Chaudière Junction	750	
Rivière du Chêne	.....	1,107
Charlotte Crossing	345	
St. Romuald	350	
Hadlow	725	
St. Henri	900	
Aston Junction loading siding	3,688	
St. Apollinaire loading siding	350	
Aston loading siding	390	
Maddington Falls	3,850	
Kingsburg Junction	2,077	
St. Nicholas	750	
St. Wenceslas	750	
Laurière	.....	2,108
Nicolet	782	
St. Cyrille	.....	1,140
St. Germain	1,864	
Bagot round house	700	
St. Rosalie crossing	.....	1,350
“ loading	1,078	

I have the honour to be, sir,
Your obedient servant,

T. C. BURPEE,
Engineer of Maintenance.

J. E. Price, Esq.,
General Superintendent, I.C.R.,
Moncton, N.B.

OFFICE OF THE CHIEF ENGINEER,
MONCTON, N.B., September 21, 1901.

SIR,—I have the honour to submit the following report on capital account expenditures for the fiscal year ending June 30, 1901.

To Increase Accommodation at Halifax.

A twenty-ton overhead transfer crane was purchased, and a concrete foundation prepared.

Grading for additional tracks was done, and additional siding accommodation provided. A large quantity of rails and fastenings, ties, &c., were provided.

To Extend Cotton Factory Branch at Halifax.

With the exception of a small extension to the cotton factory siding at Halifax, nothing was done on this account.

Balance due on Halifax Cotton Factory Branch.

The balance was paid on this account.

To Dredge and Blast Rock at Halifax.

A contract was let for submarine rock blasting, to provide twenty-eight feet of water at extreme low tide. It is still being proceeded with on the south side of pier No. 4.

Freight Shed and to Improve Station at Rockingham.

This was for a new station and alterations to be made to present building. The site was graded, plans and specifications prepared and tenders received. The contract has not yet been awarded.

Iron Highway Bridge at Rocky Lake.

The public highway was diverted and three dangerous crossings at rail level were eliminated.

A new steel overhead highway bridge, 40 feet clear span, 21 feet by 8 inches clear head room was erected on masonry abutments.

Contracts were awarded, the work on masonry abutments and road diversion was completed, and the work on the new steel bridge will be finished early next year.

Building for Baggage and Express at Truro.

Tenders were asked, a contract for a building, 30 feet by 65 feet, awarded, and the building completed.

To Rearrange, Enlarge and Extend Station Yard at Truro.

The Truro yard was rearranged and extensive additional siding accommodation provided. Thirty-five tons rails and 1,170 ties were also provided.

To Increase Accommodation at Sydney.

24·61 square acres of land were purchased to extend the station grounds at Sydney.

A contract was let for grading and tracklaying, and this work is still being proceeded with.

A sea-wall cribwork protection, about 1,400 feet long, was built in front of the marine hospital property.

The pond on the Burchell property is being filled up with material from Barrack Point. Before placing the filling, a cedar culvert, 250 feet long, was built to drain the remainder of the land purchased.

A large quantity of filling is still needed on both sides of the main line between Barrack Point and York street for additional siding accommodation.

A stone retaining wall, 700 feet long, was built along the eastern side of Intercolonial street.

An extensive yard is projected and the laying of new sidings is being proceeded with. Two hundred and twenty-five tons rails and 6,670 ties were provided. An extension to the freight house of 205 feet by 25 feet was made. The platform was also extended, and the whole building painted. The office in freight house was enlarged and modern water closets put in.

A fifty-ton track scale, purchased last year, was put in position on concrete foundations.

To Raise Sydney and Louisbourg Railway Bridge.

With the exception of a survey being made, nothing was done on this vote.

Improvements at Point Tupper.

A small building and foundations for engine and boiler, purchased last year, for raising and lowering the present transfer bridges, were built ; and engine and boiler erected.

In connection with the new ferry service, it was found necessary to remove part of the existing engine house. A contract was let for this work. Two stalls were removed from the south-west side; and an addition of five stalls made to the north-east side, two of which are 65½ feet long, and three 73 feet long inside of walls. The work is going on at present and is more than three-quarters done.

Improvements at Mulgrave.

The cribwork addition to the wharf, commenced last year, was completed.

The space between the new and old cribwork is being filled with earth taken from the cutting south of Mulgrave. By taking the earth from here, considerable additional siding room is provided.

A few sidings have already been laid, but neither the filling nor the new yard layout are yet completed.

Five and one-half acres of land were purchased, and a 'Y' built.

A small building with foundations for engine and boiler, purchased last year, for raising and lowering the present transfer bridges, was built and engine and boiler erected.

To Improve Ferry Service at Strait of Canso.

Surveys were made, extending from Mulgrave to Pirate Cove, and soundings and borings made at the latter place. Surveys and soundings were also made at Cash's Cove, and Mulgrave, Pirate Cove, Cash's Cove and Point Tupper were connected by survey. A contract was let for a train ferry steamer of 2,000 indicated horse-power, 282 feet long, and 48 feet wide, to carry 9 passenger cars, or 18 freight cars on three tracks; and the vessel is now nearly completed. A contract was let for two steel transfer lifting bridges, each 200 feet long (composed of three leaves, the inner 100 feet long, the intermediate and outer each fifty feet long), one at Mulgrave and one at Point Tupper. The work on these bridges is well advanced. Concrete and creosoted pile foundations for transfer lifting bridges were built.

A contract was let for two engines and boilers of 35 horse-power each, to operate the transfer bridges.

Contracts were let for all wood, stone and iron required for new transfer docks at Mulgrave and Point Tupper, and the work of building is well advanced.

A contract was let for dredging to 17 feet at extreme low tide at Mulgrave and Point Tupper, and the work is about one-half completed. A building 16 feet x 50 feet was erected at Mulgrave for engineer's office, district superintendent's office and blacksmith shop, and a building 16 feet x 24 feet for a supply and store-room was erected at Point Tupper. At Mulgrave the freight house was moved out on the new wharf.

Towards Building Seawall in Cape Breton.

A contract was let and about 2,960 lineal feet were completed, about 530 lineal feet partly done, and part of last year's contract finished.

To Extend Coal Trestle at Stellarton.

The Acadia Coal Company's old coal delivery, trestle and bins were removed to make room for the new engine-house, and a new trestle built on the opposite side of the track. Part of this trestle was covered in and delivery bins provided. The work was done by the Railway Department.

To Increase Station Accommodation at Westville.

Contract was let for a new brick and stone building, 27 feet x 77 feet, and the work is nearly completed. A covered platform at each end of the building was also provided for in the contract.

To Extend Intercolonial Railway to Copper Crown Works, Pictou.

The Intercolonial Railway to Copper Crown Works, at Pictou. This work was undertaken by the company last year, they provided money to buy the right of way, and do the necessary grading. The company was reimbursed this year for money expended by them. The trestle work was improved and strengthened, and the ballasting of track completed, and part of the extension fenced.

To Increase Accommodation at Amherst.

On this vote a new siding 1,200 feet long was provided. The passenger platform was extended 450 feet x 9 feet.

An extension to the baggage-room 12 feet x 25 feet was made.

An under drain 500 feet long was put in. A concrete foundation was made for a 15 tons capacity, pillar crane.

To Complete Subway at Christie's Brook, Amherst, and towards Constructing Subway at Christie's Crossing.

The masonry work commenced last year was carried to completion. The steel beams erected in place and new pitch pine floor put on.

The opening was increased to allow the sidewalk to pass under the track.

Land damages were paid to the proprietor on the east side of the approach where it was cut down below the original line of the street.

The depression caused by the subway was thoroughly drained.

To Increase Accommodation at St. John.

The new terminal wharf and warehouse have been completed. By dredging and submarine rock-blasting, 28 feet of water at extreme low tide have been secured, and dockage accommodation for large ocean steamers provided.

Materials were also provided for a fire protection water supply in the terminal warehouse, and also to supply water to vessels in both docks.

The tracks between the oil and the terminal wharf have been completed. 8,000 square feet of land have been acquired by expropriation, and a 40 foot through steel plate girder, with a siding 580 feet long were provided to reach the cold storage property.

An excavation in earth and rock was made north of the grain elevator to provide a foundation for a new wooden freight-house. This building is 315 feet x 35 feet ; it is covered with galvanized iron and has a Sparham roof. 1,425 feet of land were purchased and a barn removed to afford a better entrance to the new freight-house.

Two covered platforms, 152½ feet long each, were providede at he east end of the train-house.

38·74 square acres of land were purchased between Gilbert's Lane and the Marsh creek towards Colbrook station, for a new yard, engine-house, coal shed and other buildings. Track materials and ties for about 12 miles of new tracks were provided.

Grain Elevator, St. John.

The grain elevator was painted. The wainscoting, walls and floor of boiler-house were painted, and two Intercolonial Railway signs painted on the elevator.

The roof of elevator coal-house was covered with sparham.

Additional Conveyer on West Side of Wharf, St. John.

An additional grain conveyor, about 650 feet in total length, was erected along the west side of the new terminal wharf so that steamers can take grain in either dock.

Increased Accommodation at Lévis.

The crib retaining wall and filling on the east side of the yard tracks was completed, and additional sidings laid thereon. A crib-work quay wall 335 feet long was built along the water front between the railway wharf and Couture's wharf, affording a frontage of 435 feet for large vessels, and the filling of the space between the quay wall and the track bulkhead with earth and stone was partly completed. The open space between the railway wharf and the ferry wharf was also partly filled in with earth and stone.

Plans were prepared and tenders received for a new passenger station, 51 feet x 155½ feet.

Track materials including rails and fastenings, ties, frogs, switch gear, &c., were provided for a rearrangement and extension of the yard.

A wooden culvert 5 feet x 5 feet, 265 feet long was made to form part of a drainage system for the new station and yard, and an underground box constructed to carry pipes to the river for a water supply.

New Steel Bridge at Etchemin.

A new through riveted steel bridge, 165½ feet long over all, was erected over the Etchemin River, near Hadlow station. The old continuous iron tube was removed, and is now on hand. The stone masonry abutments were raised and widened with steel-built beams and concrete. A new hard pine floor was put on, and the metal work painted.

To Remove Rock by Widening Bennett's Cutting, &c., near Lévis

In this cutting the rock strata inclined towards the track, and several serious slides occurred, so that it became necessary to blast and remove a large volume of rock to secure safety. This work was done.

Improving Telegraph Service.

A wire was furnished and provided between Quebec and Moncton, a distance of 489 miles. A wire between Lévis and Chaudière, a distance of nine miles, was provided; and an extension of the despatchers' wire from Chaudière Junction to Chaudière was made.

Additional Houses for Engines, and Building new and Enlarging old Engine Houses.

Sydney.—The engine house for Sydney will be similar to the one at Stellarton, excepting that the brick chimney is omitted, and a system of hot blast heating, with mechanical draft, installed.

The following materials were provided :—80 tons rails, 1,150 ties, 6 sets of switch gear, 6 sets of switch ties, 6 frogs, 6,000 pounds spikes.

Stellarton.—3·84 acres of land were purchased. A new 18-stall brick engine house, boiler house, chimney, concrete turntable wall, ash pit, &c., were tendered for and contract awarded. The work has been carried on during the year and is about three-quarters done.

The foundations of pits and walls are of concrete. The posts for supporting roof are cast-iron, girders are steel-eye beams, and the roof is covered with tar and gravel. The floor, turntable ring wall and centre are of concrete. The boiler house and chimney are built of brick, with concrete foundations. The height of chimney is 82 feet.

The following materials were provided :—80 tons rails, 1,150 ties, 6 sets switch gear, 6 sets switch ties, 6 frogs, 6,000 pounds spikes.

Campbellton.—The existing brick engine house was enlarged by building a new brick wall 17 feet outside of the old one, and extending the roof. Twelve engine stalls and pits were lengthened. A room for enginemen provided, and extensions made to blacksmith shop. A new steel plate girder, 4½ feet by 50 feet long, to support old roof trusses was erected. Room for mechanical foreman's office and stores department was provided. New concrete turntable ring and centre were put in and old ones removed. A new 65 foot turntable was erected, and a new top put on. A new drop pit was provided, and a new 15-inch clay pipe sewer, 300 feet long, put in to drain all the pits. The work was done by contract, with the exception of steel plate girder, which was built by the railway department.

Larger Turntables.

A new 65 foot steel deck turntable was purchased for Cahpbellton. At Moncton, the old turntable was taken out, foundation and ring wall removed. A new foundation and ring wall of concrete were put in. The 70 foot deck turntable purchased last year erected, and a new top put on. At Richmond, the old 55 foot table from Moncton was erected on a rock foundation, with a wood ring wall. A 65 foot deck table was erected in St. John on timber foundation, with a wood ring wall. At Sayabec, the old 52 foot table taken from Campbellton was placed on timber foundations, with wood ring wall. Two hundred and twenty hard pine ties were provided.

Drop Pits.

Nothing was done on this account.

Towards Building Rest Houses at Engine Stations.

In connection with this vote, a large quantity of materials were purchased, such as iron pipe and plumbers' fittings, also 60 iron beds, 50 barrels of cement, 252 cubic yards of stone, and 6,000 bricks were provided.

To Strengthen Bridges and Towards Strengthening Iron Bridges.

The work of strengthening bridges has been continued. The 100 foot clear span new steel bridges—at Nappan 1 span, Debert 2 spans, Barnaby River 1 span, and Beau Rivage 3 spans—were completed and provided with new southern pitch pine floors. The girders for Sackville River at Bedford Station were erected in place, and two of the old spans doubled up. A new pitch pine floor was put on the whole bridge. The masonry piers were cut down and new stone tops put on.

The 70 foot span for Mulgrave Road, under crossing, was erected in place.

New steel plate girders, 56 feet long, were purchased for Sodom, Mud Creek, near Truro, and Boyer River, near St. Charles Junction. The span for Sodom River was erected in place and the old one taken out, and is on hand. A new floor was provided. The other two spans are on hand at present.

The old English lattice, 100 ft. spans, at Millstream 4 spans, Amqui 1 span, Causapscal 3 spans, and Jacquet River 3 spans, were all taken out and replaced with new thorough steel Warren truss spans, and new pitch pine floors were provided for all.

The old spans which are on hand are to be used in doubling up deck bridges at other places of the same length. River Philip bridge, 3 spans, 100 feet clear, was doubled up with two spans taken from Debert, and one from Nappan. A new floor was put on.

The new bridges put in Salmon river, Belmont, North river, Barnaby river and Nappan were painted. A Universal punch and two 25-ton jacks were purchased. A second-hand bridge 60 feet long was shipped to Prince Edward Island for Harper's pond, and also 8 old floor beams, and 10 beams were also shipped to Prince Edward Island for Murray Harbour branch. These were placed as a credit to this account.

Improved Accommodation and Facilities along the line of Railway.

The following work was done on this account :—

Sydney.—An electric semaphore was provided.

North Sydney.—Track scales on hand last year were put in.

North Sydney Junction.—A 'Y' was provided and about 6,400 feet of new sidings laid. The necessary land was purchased.

Grand Narrows.—A boat was purchased for the use of the bridge tender at the swing bridge.

Alba.—The station building walls were filled with sawdust.

Mines Road.—A new addition to station building for a kitchen for agent was built.

New Glasgow.—A siding was extended.

Stellarton.—An electric semaphore was provided.

Pictou. Track scales on hand last year were put in.

Brown's Point.—A new siding was provided here 950 feet long.

Meadowville.—The station was remodelled by providing a waiting room and enlarging office, and providing additional accommodation for agent. A new freight house, 20 x 40 feet, was also provided.

Tatamagouche.—A contract was let for about 500 feet cribwork protection sea wall, and this was nearly all completed.

Malagash.—The materials for a loading platform were purchased.

Pugwash Junction.—Track scales on hand last year were put in.

Pugwash.—A loading platform 229 x 30 feet was provided. Extra land, 0·13 of an acre, was purchased for approach to loading platform. The freight house was moved and a new siding provided. A new cattle pen was also built.

Truro. The loading platform was extended.

East Mines.—A new freight house, 20 x 40 feet, was built, new waiting room and office with bay window made in station building. The siding was extended 1,000 feet.

Westchester.—The cutting east of the station was widened for the purpose of extending the side track. A cattle pen was built.

Salt Springs.—The semaphore was extended.

Spring Hill Junction.—A small amount of work was done to complete 'Y' here.

Nappan.—A new 1½ story addition of 17½ x 20 feet was made to station house for dwelling apartments.

Amherst.—A pillar crane 15 tons capacity was bought and erected.

Sackville.—Siding was extended 1,000 feet, and a new 7-ton crane purchased.

Dorchester.—A derrick was provided on the wharf here.

Upper Dorchester.—The siding was extended 1,000 feet.

College Bridge.—A new freight shed, 20 x 40 feet, was built. The station remodelled and a new waiting room and office with bay window provided

Calhouns.—The siding was extended 1,000 feet.

Moncton.—A platform for private cars was provided. The work on track scale commenced last year was completed.

Boundary Creek.—A loading platform was provided, 346 feet long.

Petitcodiac.—An extension of 25 feet by 35 feet was made to freight house.

Penobsquis.—An addition of 14 feet to the station was made and the platform extended 100 feet.

Sussex.—The loading platform was extended 100 feet.

Norton.—New dry closets were provided.

Jubilee.—The station ground was graded.

Quispamsis.—An addition of 14 x 20 feet was made to station.

Torryburn.—A new combined station, freight house and dwelling apartments, 17 x 24 feet, with L 16 x 32 feet, was provided.

Adamsville.—Small improvements were made to the station building, and an addition to loading platform, and also passenger platform made.

Barnaby River.—A new 1½-story station building, 24 x 40 feet, was built. The old station was moved and fitted up for a freight house.

Derby Junction.—An addition was built to the station building.

Newcastle 'Y.'—A 'Y' was provided.

Newcastle coal shed.—An extension was made to the coal shed.

Bartibogue.—A new 1½ story station, 24 x 40 feet, was built. The old station was moved back a short distance and converted into a freight house.

Red Pine.—A new 1½ story station building, 24 x 40 feet, was built. The old station was moved back a short distance and converted into a freight house.

Gloucester Junction.—An extension to the freight house 20 x 50 feet was made.

Bathurst.—A baggage room 16 x 27 feet was built.

Beresford, Nigadoo, Green Point.—A building 20 x 40 feet, with a freight room and waiting room, was provided at each of these places.

Nash's Creek.—The old station was remodelled and a waiting room and office made. A new freight house 20 x 40 feet was provided.

Dalhousie Junction.—The Dalhousie branch track was extended up to the station building a distance of 2,825 feet. The Dalhousie Junction tank house was moved back 20 feet to make room for track. The spur siding was lengthened 983 feet and made a through siding, and passenger platform extended.

Dalhousie.—A baggage room 16 x 27 feet was built.

Campbellton.—An extension of 20 x 30 feet for an office was made to freight house.

Moffats.—A station building, with dwelling apartments 17 x 22 feet, was built. The old station and freight house was moved.

St. Alexis.—A station building 17 x 24 feet, with L 17 x 22 feet, with dwelling apartments and freight house 20 x 30 feet, were provided. The foundations were prepared by the Railway Department.

Millstream.—Platform was extended.

St. Octave.—A piece of land 4,060 square feet was purchased for enlarging station ground and plans prepared for a new station and extension of the freight-house.

St. Flavie.—An extension was made to the electric semaphore.

Rivière du Loup.—A baggage-room was fitted up.

Dessaint.—A combined station and freight-house with dwelling apartments, 17 feet x 34 feet, with 'L' 17 feet x 27 feet was provided.

St. Philip de Neri.—·465 of an acre of land for extension of the station yard was purchased.

Gagnon.—A building for combined station, freight-house and dwelling apartments was provided 17 feet x 34 feet, with 'L' 17 feet x 27 feet.

St. Pierre.—A new freight-house 20 feet x 50 feet was provided. The station building was remodelled and modern water closets put in.

St. Valier.—Storm windows were provided.

Hadlow.—Water service was put in one of the tenement houses.

St. Romuald.—A new passenger station 24 feet x 40 feet was provided.

St. Nicholas.—A dwelling 1½ story for agent, 25 feet x 31 feet was provided.

St. Appollinaire.—A combined two story station and dwelling 26 feet x 40 feet, with 'L' 16 feet x 18 feet, one story was provided. Platform was extended 60 feet.

Rivière du Chêne.—A building for combined station, freight-room and dwelling apartments was provided, 17 feet x 34 feet, with 'L' 17 feet x 27 feet. 2,500 square feet of land was purchased. A new platform 300 feet long was provided.

Kingsburg Junction.—The platform was extended 100 feet.

Kingsbury, Aston, Laurier.—Some small additional work was done to the buildings erected last year. At Aston a platform 300 feet was built.

St. Monique.—Plans for remodelling of St. Monique station were made.

Maddington Falls.—A combined two story station and dwelling 26 feet x 40 feet, with an 'L' 16 feet x 18 feet; one story was provided. A new platform 444 feet was built.

Mitchell.—The station was sheated inside with tongued and grooved sheating.

St. Cyrille.—A combined two story station and dwelling 26 feet x 40 feet with a one story 'L' 16 feet x 18 feet was provided. A platform 444 feet was built. Old station was fitted for freight shed. ·46 of an arpent of land was purchased.

St. Germain.—A combined two story station and dwelling 26 feet x 40 feet, with a one story 'L' 16 feet x 18 feet was provided. A platform 444 feet long was built. Old station moved and fitted up for freight-house. 1·22 arpents of lands were purchased.

St. Eugène.—A combine two story station and dwelling 26 feet x 40 feet, with a one story 'L' 16 feet by 18 feet was provided. A platform 444 feet long was built Old station moved and fitted up for freight-house. About ½ acre of land was purchased. A well was sunk.

Bagot.—A combined two story station and dwelling 26 feet x 40 feet, with a one story 'L' 16 feet x 18 feet was provided. A platform 444 feet long was built. Old station moved and fitted for freight-house. 0·39 of an arpent of land was purchased.

Ste. Rosalie.—·56 of an arpent of land was purchased for a loading ground.

Rivière du Loup, St. Fabien, St. Leonard, Drummondville.—Electric semaphores were erected at these places.

Snow fences were erected as follows :—

——	Fencing 12 ft. high.	Fencing 8 ft. high.	Portable Fencing.
	Lin. ft.	Lin. ft.	Lin. ft.
St. John to Point du Chene Division	....	1,866	....
Painsec to Truro Division	....	300	559
Halifax to Stellarton Division	....	1,370	165
Moncton to Newcastle "	1,300	....	1,500
Newcastle to Campbellton Division	2,060	....	360
Campbellton to Rivière du Loup Division	1,288	....	28,545
Montreal Extension	4,125	....	....
Totals	8,773	3,536	31,129

To Increase Facilities along the Line.

North Sydney.—A new siding 2,884 feet long was put in. An extension of 100 feet x 25 feet was made to the freight-house. A new baggage-room, 15 feet x 27 feet was built.

River Deny's.—The platform was extended. 1·40 acres of land for additional sidings were purchased.

Mulgrave.—An ice-house 18 feet x 38 feet was built.

Taylor's Road.—A shelter for passengers was erected.

Conn's Mills.—A loading platform 60 feet long was built.

Moncton.—Four main columns for supporting the roof of erecting shop were moved. Two new girders built. A new traverse table was made, and the pit was widened. New supporting rails with pedestal foundations were placed.

St. John.—The loading platform at Stanley street bridge was extended.

Moffatt's.—A platform was provided.

Rivière du Loup.—Some additional improvements were made to the station building which was remodelled last year.

St. François.—A new freight shed 20 feet x 40 feet was provided.

St. Jean Chrysostôme.—A flag station was provided.

Water supplies at various places.

Grand Narrows.—3,600 square feet of land was purchased on Campbell's brook for a gravity supply. A reservoir was built. ¾ of a mile of 4-inch and 6-inch cast-iron water pipe was laid. A 50,000 gallon tank was partly built.

River Deny's.—¾ of a mile of 4-inch and 6-inch cast-iron water pipe was purchased for a gravitation water supply. ·23 of an acre of land for reservoir was purchased.

Point Tupper.—Two miles of 6-inch cast-iron water pipes were purchased for a gravitation water supply.

Denmark.—A well was provided.

River John, Truro, Harcourt.—Bore holes were sunk at each of these places.

Londonderry.—A survey was made for a gravitation water supply and 24,750 square feet of land purchased.

Painsec Junction.—1,800 feet of 2-inch water pipe was laid from a spring, and a gravitation water service placed in dwelling apartments and waiting-room of station.

Moncton.—A new brick and stone boiler house, 31 feet by 47 feet, was provided. The water supply system remodelled in part. Some new water pipes were laid and new hydrants were placed.

Flatlands.—A water supply was put into the station building.

St. Charles Junction.—Four arpents of land were purchased for a gravitation water supply. One mile of 4-inch and 6-inch cast-iron water pipe was laid and connected to tank.

Forestdale.—Material was supplied for a water tank at this place.

Carmel, St. Michael.—A well was provided at each of these places.

Additional Sidings along the Line.

In connection with this account, the following land was purchased :—

River Denys.—1·40 acres.

Newcastle.—'Y' land, two acres.

Maddington Falls.—0·86 arpents.

St. Wenceslas.—A building 17 feet x 34 feet, with 'L' 17 feet x 27 feet, for a combined station and freight house, with dwelling apartments, was provided. A new siding, 747 feet long, was made.

At the following places, the present sidings were extended, or new additional sidings made :—

Place.	New. Lin. feet.	Extended Lin. ft.
Division, Halifax to Stellarton—		
Richmond	4,059	
Dartmouth	1,902	
Wellington	756	
Truro	5,744	
Division, Stellarton to Oxford Junction—		
Bear Brook	463	
Division, Stellarton to Mulgrave—		
Cape Porcupine	788	
Pirate Harbour	2,958	
Division, Point Tupper to Sydney—		
Point Tupper	3,171	
River Denys	250	
Orangedale	383	
Jefferson	1,200	
Alba	1,019	
Boisdale	700	
George's River	1,280	
North Sydney Junction	15,722	
Estmere	796	
Division, Truro to Painsec Junction—		
Onslow		150
Maccan	169	
Dorchester Penitentiary	450	
Division, Point du Chêne to St. John—		
Irishtown Road	387	
Moncton	362	
Lawlor's Lake	271	
St. John	10,263	

Place.	New. Lin. feet.	Extended Lin. ft.
Division Newcastle to Campbellton—		
Campbellton		117
Dalhoutie	234	
Division, Campbellton to Ste. Flavie—		
Theberge's		914
St. Moise	1,281	
Ste. Flavie	2,118	
Division, Ste. Flavie to Rivière du Loup—		
St. Luce Ballast pit	1,106	
St. Anaclet	362	
Sacré Cœur		1,932
St. Eloi		560
Rivière du Loup east of bridge	2,011	
" "	960	235
Cacouna		1,876
Rivière du Loup	737	
Division, Rivière du Loup to Lévis—		
Rivière du Loup West end	230	
" " at Round House	284	
Rivière du Loup West Coal Shed	2,324	
St. Philip de Neri	550	
Ste. Anne	404	
St Jean Port Joli	458	
L'Islet	1,166	
Montmagny	1,000	
St. Valier	489	
St. Charles Junction	878	
St. Henri	900	
Division, Lévis to Ste. Rosalie—		
Hadlow	725	
St. Romuald	350	
Chaudière Junction	750	
St. Nicholas		750
St. Apollinaire	350	
Laurier	2,168	
Rivière du Chêne	1,107	
Kingsbury Junction	2,077	
Maddington Falls	3,850	
Aston Junction	3,688	
Nicolet	782	
Aston Landing	390	
Carmel	350	
St. Cyrille		1,140
St. Germain	1,864	
Bagot	700	
Charlotte Crossing	345	
St. Rosalie	2,428	

NOTE.—Certain of the above works were done by the maintenance department, for which see report of the engineer of maintenance, Mr. T. C. Burpee.

From above, the totals are for extension of sidings, 1·75 miles. For new sidings 17·64 miles.

Steel Rails and Fastenings.

Division, Sydney to Point Tupper.—Eighty-two miles of 56-lb. 4-inch rails and fastenings were taken up and relaid with 80-lb. 5-inch rails and fastenings.

Division, Truro to Moncton.—Twenty-nine and three-quarter miles of 67-lb. 4½-inch rails and fastenings were taken up and relaid with 80-lb. 5-inch rails and fastenings.

Division, Campbellton to Ste. Flavie.—12·84 miles of 67-lb. 4½-inch rails and fastenings were taken up and relaid with 80-lb. 5-inch rails and fastenings.

And the following materials were supplied :—7,314 twisted rail braces, 143,798 intermediate tie plates, 9,762 joint tie plates, 1,100 slide tie plates.

Original Construction.

On this account, an inquiry into the St. Charles Branch expenditures was made.

Amounts were paid for legal and engineering expenses in connection with old construction claims.

Land Damages on Oxford, New Glasgow and Cape Breton Divisions.

On this account, two claims for stream diversions and two claims for land damages, together with legal services connected therewith, were paid.

NOTE.—Certain of the above works were done by the maintenance department, for which see report of the engineer of maintenance, Mr. T. C. Burpee.

PRINCE EDWARD ISLAND RAILWAY.

Murray Harbour Branch, Including Hillsborough Bridge.

The grading of section No. 2, 11½ miles from Mutch's Point tc Village Green, is practically completed, and almost ready for ballasting and track laying. Most of the right of way has been secured and paid for.

During the winter, the remaining portion of the line, 31½ miles to Murray River, was located on the ground ; and the alignment and profiles of grades submitted and approved. The piers and abutments of the Hillsborough bridge were laid off upon the ice ; and an extensive triangulation made to permanent stations on the shores, from which the positions of the piers and abutments will be determined during construction. A contract was let for the substructure and approaches of the bridge on October 8, 1900. Sub-contracts for materials were let during the winter ; and on the opening of navigation, a large amount of plant, timber, iron, cement, stone, sand, &c., was brought to the site ; and work on the pneumatic caissons and machinery is now being prosecuted with vigour. A series of percussion drill borings were made through the ice on the site of the abutments in February and March, 1901.

To Shorten Main Line by Removal of Curves.

The improvement of the alignment near Colville was completed, the curvature being reduced and the line shortened.

I have the honour to be, sir,
Your obedient servant,

W. B. MACKENZIE,
Chief Engineer.

D. POTTINGER, Esq.,
General Manager, Government Railways,
Moncton, N.B.

INTERCOLONIAL RAILWAY OF CANADA.

OFFICE OF THE MECHANICAL SUPERINTENDENT,
MONCTON, N.B., September 23, 1901.

SIR,—I beg to submit for your information the following statements prepared by the Mechanical Accountant :—

Statement showing the number of locomotives and of the various classes of cars.
Locomotive and car mileage.
Abstract of locomotive returns.
Locomotive power for each month.
General statement of expenses of mechanical department.

Also, a summary of the principal work done in drawing office, Moncton locomotive and car shops, shops at Rivière du Loup and Richmond.

Complete statement of renewals and repairs to the water service on the whole system, for the year ending June 30, 1901.

Yours truly,

JOHN SUTTON,
for Mechanical Superintendent.

D. POTTINGER, Esq.,
General Manager,
Moncton, N.B.

DRAWING OFFICE.

Work done in drawing office for the year ending June 30, 1901 :—

408 new drawings have been supplied. 133 of these were finished tracings sent from the Baldwin Locomotive Works for new consolidation engines Nos. 211 to Nos. 227, Cleveland engine 228 and consolidation engines 229 and 230. 60 new tracings were made from blue prints, supplied from the Canadian Locomotive and Engine Works for ten-wheeled passenger engines, 72, 93, 116, 119 and 166. 11 new drawings were made for engines of the same class, which are being built in Moncton shops to order, 334.

The following list includes the principal drawings made for the year :—

Wheel test, 12 feet drop, 140 lbs. weight.
Cast iron wheel for 100,000 pound freight cars.
Bolster springs for 100,000 pounds freight cars.
Eccentric for Cleveland engine No. 228.
Eccentric strap for Cleveland engine No. 228.
Link for Cleveland engine No. 228.
Rock shaft for Cleveland engine No. 228.
Malleable iron spring pocket for passenger cars (automatic couplers).
Snow plow for stub pilot.
Ventilation for paint shop.
Additional jacks for drop table, erecting shop.
Extended wagon top boiler for four new passenger engines, to be built in Moncton shops.
Standard axle for 100,000 lbs. car, M.C.B.
Proposed plan of working coach.
Plan of brick (car) shop.
Uncoupling gear for 60 feet postal and baggage cars.

Details for 5-inch x 5-inch engine for turntable.
Details of side door castings for postal and baggage cars.
Side and end doors for 60 feet postal and baggage cars.
Partition for general freight agent's office.
Stay-bolt tester.
Machine for fixing couplers on train hose.
Addition to ends of existing traveller, Moncton shop.
Conductor's van.
Swing-truck for conductor's van.
Iron details for truck, conductor's van.
Cut gears for transfer table.
Interior fittings for conductor's vans.
Foundation plate for engine on transfer table.
Wrought iron details for conductors' vans.
Alteration to spring gear, class A1 (119).
Air brake application for conductors' vans.
General plan of building for water service.
Automatic dies of building and cutting gibs on standard Gould drawbar strap.
Details of brake gear for conductor's van.
Draw-gear for conductors' van.
Wrought iron details for conductors' vans.
Travelling crane for erecting shop.
Smoke-stack for machine shop, Richmond.
Wrought iron stack for pump-house, water service.
Valve setting machine for Moncton shop.
Wrought iron details for 50 tons wrecking crane.
There were 1,250 blue prints sent out of office during the year.
New specifications for modern box and platform cars were made.

MONCTON LOCOMOTIVE SHOPS.

The following locomotives were ordered and received during the year and charged to capital account :—

Eight simple passenger engines from the Manchester Locomotive Works.

Five simple freight engines and five compound freight engines from the Richmond Locomotive Works.

Six simple consolidation freight locomotives from the Canadian locomotive works.

One passenger locomotive, fitted with Cleveland cylinders, and two freight locomotives fitted with Cleveland cylinders were received from the Dickson Locomotive Works, Scranton, Pa.

One hundred and eleven locomotives received heavy repairs, 26 received medium repairs and 55 specific repairs.

The following new parts being supplied :—Four new half side sheets, 374 new tubes, 25 new driving wheel centres, 1 new boiler, 79 new driving wheel tires, 49 new driving wheel axles, 15 new truck wheel axles, 19 crank pins, 10 cylinders, 10 half saddle cylinders, 37 W. A. B., 9½-inch pumps, 9 new cabs, 56 new pilots, 4 new tender frames, 3 new tender trucks, 422 new tender and truck tires. One hundred and thirty-eight boilers were tested. Fifty-six fire boxes were patched, 11,417 tubes were pieced.

Two hundred and eighty-seven pairs of truck tires were turned and 255 pairs driving wheel tires were turned.

One hundred and eleven engines and tenders were repainted and varnished.

Four new tenders, complete, were constructed.

Special work was done as follows :—

Ten new steel snow-plows were made.
Four new air hoists were made.
Two boilers for water service were constructed.
Twelve cylinders for drop-pits were made.
The traversing table in erecting shop was greatly improved.

A large number of new machines were purchased and charged to capital account. These necessitated a large amount of work in putting up in shop, building foundations, &c.

In addition to above work the following material was turned out :—321,778 bolts were forged, 1,270,032 pounds other forgings, 13,261 studs screwed, 143,285 pounds nuts tapped.

MONCTON BRASS FOUNDRY.

Output.—139,987 pounds brass castings, 149,363 brass bearings.

MONCTON CAR SHOPS.

The following new cars were received during the year and charged to capital account :—

Six new first-class day coaches, 3 new dining cars from the Barney and Smith Company, Dayton, Ohio.

Five hundred and two box cars and 17 refrigerator cars, from Rhodes, Curry & Co., Amherst, N.S.

One hundred and fifty box cars and 150 platform cars from the Crossen Car Company, Cobourg Ont.

Fifty box cars from the Rathbun Company, Deseronto, Ont.

The following cars were built at Moncton shops :—

Thirty box cars built on order.

The following cars were converted :—

One platform car, two box cars.

The following cars received heavy repairs :—

Four official cars, 13 sleeping cars, 5 dining cars, 4 parlour cars, 57 first-class cars, 34 second-class cars, 20 second-class sleeping cars, 14 postal cars, 29 baggage cars, 24 freight vans, 4 snow ploughs, 3 wing ploughs and 419 freight cars.

The following cars received light repairs :—

Ten official cars, 10 sleeping cars, 6 dining cars, 25 first-class cars, 41 second-class cars, 7 second-class sleeping cars, 4 postal cars, 12 baggage cars, 42 freight vans, 4 snow ploughs, 1 flanger and 3,824 freight cars.

The following cars were scraped, filled stained and varnished :—

Three sleeping cars, 4 baggage cars, 4 first-class cars, 3 second-class cars.

The following cars were renovated and varnished :—

One official car, four sleeping cars, six dining cars, two parlour cars, twenty-five first-class cars, nine second-class cars, eight second-class sleeping cars, eleven postal cars, thirteen baggage cars, one freight van, one snow plough and one wing plough. Also, one official car renovated only.

The following cars were repainted :—

Twenty-nine vans, 203 box cars, 183 flat cars, thirty-nine hopper cars, forty-seven gondola cars, ten refrigerator cars, six flangers, four wing ploughs and nine snow ploughs.

The following cars were rebuilt :—

Fourteen platform cars, five gondola cars, one hopper car, one box car and one snow plough.

Special work was done as follows :—

Ninety-nine new wooden trucks were built and 114 Sterlingworth steel trucks were received from the Record Foundry Co., Moncton, N.B., and put under freight cars.

3,378 new wheels were pressed on axles and 1,097 second-hand wheels were pressed on axles.

388 new axles were turned, 1,771 old axles were trued up, 1,166 steel tired wheels turned, 3,454 wheels pressed off axles.

Forty-two freight cars were equipped with Westinghouse air brakes.

The following cars were fitted with M. C. B. couplers :—

One official car, seven sleeping cars, three parlour cars, thirty-three first-class cars, nineteen second-class cars, three second-class sleepers, ten postal cars, seventeen baggage cars, and 368 freight cars.

Eight second-class sleepers were fitted with new dining tables, eight to each car.

In addition to the lumber prepared for the above repairs, 460,000 feet was milled to store orders, also a large amount of work was done to freight and baggage car trucks, chairs, footboards, ticket cases and station furniture on account of store No. 1.

RICHMOND SHOPS.

Heavy repairs, engines	10
Specific repairs, engines	106
Fire boxes patched	2
Tires turned, pairs	162
Boilers tested	32
New driving wheel tires	18
Driving tires, turned pairs	33
New cabs	1
New pilots	7
New tender frames	1
Bolts forged	29,200
Bolts screwed	37,200
Studs screwed	925
Engines and tenders painted	10

RIVIÈRE DU LOUP SHOPS.

Heavy repairs, engines	22
Specific repairs	44
New tube sheets supplied	2
New side sheets supplied	4
New half side sheets supplied	6
New tubes supplied	1,637
Fire boxes patched	6
Tubes pieced	182
Tires turned, pairs	128
Boilers tested	63
New driving wheel tires supplied	9
Driving wheel tires turned, pairs	77
New driving axles supplied	2
New main rods supplied	1
New crank pins supplied	1
New cabs supplied	1
New pilots supplied	26
New tender frames supplied	2
Engines and tenders painted	24
Bolts forged	4,200
Bolts screwed	15,400
Studs screwed	34,200
Pounds brass castings	10,317
Pounds brass bearings	24,695

Special Work.—Nineteen new locomotives were coupled up.

WATER SERVICE FROM JULY 1, 1900, TO JUNE 30, 1901.

AMHERST.

February, 1901. Repaired crane pipe.

ANTIGONISH.

November, 1900. Smoke pipe for top of tank.
January, 1901. Repaired tank pipe.
May, 1901. Repaired two tank pipes.

ARMOUR'S ROAD.

July, 1900. Repaired trestle under the tank.
August, 1901. New tank pipe.
November, 1900. Four joints 6-inch stove pipe. One No. 14 Globe stove.

BAYFIELD ROAD.

August, 1900. New tank pipe.
November, 1900. Smoke pipe for top of tank.
January, 1901. Repaired tank pipe. Four joints 7-inch galvanized stove pipe.

BAGOT.

November, 1900. Smoke pipe for top of tank.
December, 1900. Repaired smoke pipe on top of tank and inspirator.
March, 1901. Washed out the boiler.
April, 1901. Repaired steam pump.

BATHURST.

October, 1900. Smoke pipe for top of tank. New trestle under tank. Cut the hoops and re-riveted them. Painted tank.
December, 1900. Three tank pipes repaired.
January, 1901. Smoke pipe for top of tank.
March, 1901. Disconnected the water from Leger's Hotel and repaired tank valve.

BEAVER BROOK.

November, 1900. Ten joints 7-inch pipe.

BOISDALE.

September, 1900. Repaired tank pipe.
October, 1900. Repaired tank pipe.
November, 1900. Repaired tank pipe. One new copper strainer.
December, 1900. Fifteen feet 7-inch iron pipe. One elbow, 4-inch.
June, 1901. Repaired tank pipe.

CALHOUNS.

December, 1900. One No. 16 grate bar for stove. One joint 7-inch stovepipe. One box wrench.
January, 1901. One tank pipe.

CAUSAPSCAL.

September, 1900. Cleaned out the reservoir.
March, 1901. Repaired two tank pipes.

CAMPBELLTON.

July, 1900. Cleaned out reservoir, and repaired covering on reservoir.
October, 1900. Smoke pipe for top of tank.
November, 1900. New leather on tank valve. Four joints -7inch stovepipe. Repaired tank pipe.
January, 1901. Repaired tank pipe.

CEDAR HALL.

November, 1900. One No. 16 Globe stove. Seven lengths 7-inch stovepipe. New leather on tank valve. Repaired reservoir and new covering. Repaired tank pipe.

December, 1900. New tank pipe.

February, 1900. Connected boiler and steam pump at Brook, east of the station, to supply engines with water. (Temporary.)

April, 1900. Repaired tank pipe. New leather on tank valve, and repaired pipe chains.

CHARLO.

July, 1900. New smoke pipe for boiler.

January, 1901. Repaired tank pipe.

March, 1901. Repaired tank pipe.

CHAUDIÈRE.

July, 1900. Repaired pump in station.

November, 1900. Repaired tank pipe.

CANAAN.

July, 1900. Built new reservoir. Finished new 50,000 gallon tank. Galvanized smoke pipe for top of tank. New tank pipe. Fenced new reservoir.

December, 1900. One No. 16 Globe stove. Four joints 7-inch stove pipe.

February, 1901. Repaired three tank pipes.

January, 1901. Repaired tank pipe.

DRUMMONDVILLE.

July, 1900. Repaired tank pipe.

February, 1901. Repaired tank pipe and tank valve.

DALHOUSIE.

August, 1900. New crane pipe.

November, 1900. Cleaned out reservoir and put on new covering. Repaired crane.

December, 1900. Copper strainer. Repaired reservoir and new cover. Repaired crane and 6-inch water gate.

DALHOUSIE JUNCTION.

November, 1900. One No. 16 Globe stove. Eight joints 7-inch pipe. Two elbows, 7-inch.

December, 1900. One piece of 7-inch stovepipe, galvanized. Repaired tank pipe.

FOLLEIGH.

September, 1900. Repaired tank pipe.

November, 1900. Smoke pipe for top of tank.

January, 1901. Repaired tank pipe.

FORESTDALE.

September, 1900. Repaired tank and steam pump.

October, 1900. Repaired tank valve.

GRAND NARROWS.

January, 1901. Laid 3,400 feet of pipe, cast iron, and foundation of tank.

HARCOURT.

October, 1900. Smoke pipe for top of tank.

December, 1900. Repaired tank valve.

February, 1901. Repaired tank valve. Put down 6-inch bore hole 251 from bottom of well. Moved steam pump out of tank, and placed in the well 12 feet from surface, and built house over the well.

HADLOW.

September, 1900. Repaired steam pump.

HAMPTON.

February, 1901. Repaired tank pipe.

ISLE VERTE.

August, 1900. Repaired leaks in tanks.

JACQUET RIVER.

July, 1900. Repaired tank pipe.
November, 1900. Twelve joints 7-inch stove pipe.
February, 1901. Repaired tank pipe.
April, 1901. Repaired two tank pipes.
May, 1901. Repaired tank pipe.

LONDONDERRY.

September, 1900. Repaired tank pipe.
December, 1900. One nipple, 2 inches. One nipple, 1½ inches.

LITTLE METIS.

September, 1900. Repaired tank pipe.
January, 1901. Repaired tank pipe.

L'ISLET.

September, 1900. Cleaned out the tank.

LÉVIS.

July, 1900. Repaired water pipes in electric light station.

August, 1900. Repaired heater pipes in station and changed steam pumps.

December, 1900. Repaired steam pump. New discharge pipe for injector. New injector.

MONCTON.

June, 1901. New trestle under tank. Cut and riveted the hoops and painted it. Put in two repaired 8-inch water gates in the crane. Laid 1,500 feet cast-iron pipe.

Put in four fire hydrants outside and put eight 2½ connections inside of paint and freight car shops.

METAPEDIA.

February, 1901. Nine joints, 7-inch galvanized stovepipe.

MILLSTREAM.

November, 1900. Repaired trestle and tank. Cleaned out the reservoir.
January, 1901. Repaired tank pipe.
February, 1901. Four joints, 7-inch stovepipe, galvanized.
May, 1901. Repaired tank pipe.

MULGRAVE.

September, 1900. New tank pipe.
November, 1900. Smoke pipe for top of tank. Cleaned our reservoir.
January, 1901. Repaired three tank pipes.

MCKINNON'S HARBOUR.

August, 1900. Repaired tank pipe.
December, 1900. Repaired tank pipe and repaired wind-mill.
January, 1901. Repaired tank pipe.
February, 1901. Repaired tank pipe.
June, 1901. Repaired tank pipe.

NEW GLASGOW.

July, 1900. Repaired crane pipe.
August, 1900. New crane pipe.
December, 1900. Repaired crane pipe.
January, 1901. Repaired crane pipe.

NORTH SYDNEY.

August, 1900. Repaired tank pipe.
September, 1900. Repaired trestle and raised tank up to standard height. Cut the hoops and riveted them, and repaired the tank.
February, 1901. Repaired tank pipe.

NICOLET.

January, 1901. Repaired crane.

NEWPORT.

October, 1900. Smoke pipe for top of tank. New leather on tank valve.

OXFORD JUNCTION.

November, 1900. Smoke pipe for top of tank.

POINTE DU CHÊNE.

January, 1901. Repaired tank pipe.

PETITCODIAC.

January, 1901. Four joints, 7-inch, galvanized stovepipe.

PIEDMONT.

July, 1900. New copper strainer and cleaned the tank reservoir.
October, 1900. New tank pipe.
February, 1901. Repaired tank pipe.

PICTOU.

July, 1900. Repaired tank pipe and ball cock.
February, 1901. Repaired tank pipe.
May, 1901. Repaired tank pipe.

PUGWASH JUNCTION.

July, 1900. New tank pipe.
August, 1900. Repaired tank pipe.
November, 1900. Three sheets tinned iron. 1-elbow, 7-inch (stovepipe).

RIVER JOHN.

December, 1900. Put down 6-inch bore hole 477 feet.
May, 1901. One new tank pipe. Repaired tank valve.

RED PINE.

October, 1900. Smoke pipe for top of tank.
November, 1900. One No. 16 Globe stove. Four joints 7-inch pipe.
New leather on tank valve.

ROGERSVILLE.

September, 1900. Repaired tank pipe.
November, 1900. Smoke pipe for top of tank.
February, 1901. Repaired tank pipe.
April, 1901. Put in a new No. 6 Knowles steam pump and shipped old pump to Moncton for repairs.

RIVIÈRE DU LOUP.

July, 1900. Repaired water pipes and station closets.
August, 1900. Repaired steam pump.
April, 1901. Put in water pipe to wash coal cars.

RIVERSIDE.

November, 1900. Twenty joints, 7-inch galvanized pipe. Two elbows. One outside joint with cap.
December, 1900. One stove pipe ventilator.

RIVIÈRE DU CHÊNE.

July, 1900. Repaired tank valve.

December, 1900. Repaired tank valve.

March, 1901. Repaired steam pump, washed out the boiler and put in new grate.

April, 1901. Repaired tank valve.

May, 1901. Repaired tank valve.

June, 1901. Repaired steam pump, cleaned out well at the river.

RIMOUSKI.

November, 1900. Smoke pipe for top of tank.

January, 1901. Repaired tank pipe.

SYDNEY.

October, 1900. Repaired tank pipe.

November, 1901. One piece 4-inch pipe, 12 feet long, 2 elbows, 4 inches. Repaired and raised tank up to standard height, cut hoops and reriveted them and painted the tank.

December, 1900. Repaired tank pipe.

February, 1901. Repaired tank pipe.

SPRINGHILL JUNCTION.

November, 1900. One piece 2½-inch galvanized iron pipe, 1 peet valve 2½ inches.

January, 1901. Repaired tank pipe.

April, 1901. Repaired tank pipe and steam pipe. Cleaned out reservoir and repaired two leaks in bottom of tank.

SACRE CŒUR.

September, 1900. Repaired crane. Cleaned the reservoir.

November, 1900. Repaired crane.

SUSSEX.

November, 1900. Smoke pipe for top of tank. Took up three drive well points and put down five drive well points, and connected them to steam pump. Repaired tank pipe.

STELLARTON.

July, 1900. Repaired tank and laid water pipe to ash pit.

November, 1900. Repaired tank pipe.

May, 1901. Two new tank pipes and one repaired.

ST. PIERRE.

July, 1900. Repaired suction pipe, foot valve and steam pipe.

August, 1900. Cleaned out the well and unloaded car lumber for tank repairs. Repaired steam pump.

April, 1901. Washed out boilers. Repaired tank pipe.

May, 1901. Repaired steam pump. Repaired tank pipe.

ST. FABIEN.

December, 1900. Repaired steam pump.

April, 1901. Washed out boiler and repaired steam pump.

June, 1901. Repaired lubricator.

ST. LEONARD JUNCTION.

August, 1900. Smoke pipe for top of tank.

October, 1900. New tank pipe. Finished new 50,000 gallon tank.

November, 1900. Repaired tank pipe.

ST. VALIER.

April, 1901. Washed out boiler.

June, 1901. Put in steam pump.

STE. FLAVIE.

July, 1900. Tested stationary boiler.

August, 1900. Put in No. 6 Blake steam pump, and shipped the other to Moncton for repairs.

ST. PASCHAL.

August, 1900.Repaired water pipe and crane.

STE. ANNE.

July, 1900. Repaired water pipes in building.

ST. APOLLINAIRE.

December, 1900. Repaired tank pipe and inspirator.

February, 1901. Repaired tank foundation, tank valve and inspirator.

March, 1901. Changed steam pump. Put in No. 36 Knowles, and shipped other pump for repairs.

May, 1901. Put in repaired steam pump and new discharge pipe ; 2½-inch galvanized 40 feet repaired tank pipe.

ST. HELÈNE.

December, 1900. Repaired ball cock.

April, 1901. Repaired tank pipe and tank pipe chains.

STE. MOÏSE.

August, 1900. New copper strainer.

February, 1901. Galvanized smoke pipe for top of boiler.

April, 1901. Repaired tank pipe.

June, 1901. Repaired tank pipe.

ST. CHARLES.

August, 1900. Smoke pipe for top of tank.

January, 1901. Finished new 50,000 gallon tank, and connected boiler and steam pump.

April, 1901. Washed out and repaired tank pipe.

June, 1901. Laid 5,400 feet cast-iron pipe to lake and made connections to tank. Changed pump and pipes.

ST. CHARLES JUNCTION.

October, 1900. New tank pipe. Washed out boiler.

November, 1900. One piece 4-inch pipe 11 feet long, one piece of 4-inch pipe three feet long, one elbow 4-inch. One No. 16 Globe stove. Five joints of 7-inch stove pipe.

December, 1900. Twenty-eight feet 4-inch iron pipe. One elbow, 4-inch.

TRURO.

October, 1900. Laid 2,800 feet of pipe, different sizes, 5 inches to 3 inches on top of the ground. Put up a small building and connected boiler and pump.

December, 1900. Smoke pipe for top of boiler. Five hundred and seventy-five feet 3-inch galvanized iron pipe, three elbows, galvanized, two nipples, galvanized. One No. 16 Knowles steam pump. One tank boiler No. 17. One copper strainer.

January, 1901. Repaired tank pipe. One strainer. Put down bore 6 inches, 198 feet. Put off an old box car body in east end of yard and put in boiler and No. 16 steam pump for temporary use.

February, 1901. Repaired tank pipe, and put down 6-inch bore-hole 219 feet.

June, 1901. Connected the bore-holes, made well at the brook 12 feet deep, and 200 feet 4-inch galvanized pipe. Put in a No. A Knowles steam pump.

TATAMAGOUCHE.

July, 1901. New copper strainer. Cleaned out the reservoir and repaired fence.

February, 1901. One new tank pipe. Two repaired.

THOMPSON.

December, 1900. New tank pipe.

January, 1901. New tank pipe.

WEST RIVER.

August, 1900. Repaired tank pipe.
November, 1900. Repaired tank pipe.
January, 1901. Repaired tank pipe.
February, 1901. Repaired tank pipe.

WEST BAY ROAD.

December, 1900. Repaired tank pipe. Put in a new steam pump, and shipped the other pumps to Moncton for repairs.
January, 1901. Repaired two tank pipes.
February, 1901. Repaired two tank pipes.
March, 1901. Repaired two tank pipes.
April, 1901. Repaired tank pipe and cylinder cocks.
May, 1901. Repaired three tank pipes.

WEST COOK.

November, 1900.Smoke pipe for top of tank.

A.—INTERCOLONIAL RAILWAY,

STATEMENT showing the Number of Locomotives and of the Various classes of Cars on July 1, 1900, and on June 30, 1901.

		The Various Classes of Cars.																					
	Locomotives.	First Class Sleepers.	Second Class Sleepers.	Parlour.	Dining Cars.	First Class Passengers.	Second Class Passengers.	Postal and Smoking.	Express and Baggage.	Box.	Refrigerator.	Platform, 10, 15, 20 and 30 tons.	Hoppers, 6 tons.	Gondolas, 20 tons.	Coal Cars, 20 tons.	Stock Cars.	Auxiliary and Tool Cars.	Vans.	Total.	Snow Ploughs.	Wing Ploughs.	Flangers.	Steam Ploughs.	Total.
On hand serviceable July, 1900	226	23	19	5	4	102	93	28	43	2,768	59	2,315	937	72	580	88	9	98	7,243	49	10	22	2	83
Condemned July, 1900	2	....	....	....	....	....	....	....	2	28	6	4	62	157	167	15	....	1	442	....	....	..	....	....
Total	228	23	19	5	4	102	93	28	45	2,796	65	2,319	999	229	747	103	9	99	7,685	49	10	22	2	83
Received on capital account	20	4	....	....	....	6	....	....	....	1,088	19	2	....	...	....	....	....	..	......	....	....	..	....	....
Transferred from gondolas to platform	....	....	...	....	....	...	....	....	....	...	....	77	....	77	....	....	....	..	......	....	....	..	...	...
Transferred from large coal to platform	....	....	....	....	....	....	....	....	....	....	....	123	....	....	123	....	...	..	..	....	....	..	....	....
Total	248	27	19	5	4	108	93	28	45	3,884	84	2,521	999	152	624	103	9	99	8,804	49	10	22	2	83
Condemned July 1, 1900	2	....	....	...	....	....	....	...	2	28	6	4	62	157	167	15	..	1	442	...	....	..	....	....
" during the year	4	....	....	....	....	1	....	....	....	46	1	49	24	9	9	2	1	3	145	1	....	..	....	....
	6	....	....	....	....	1	....	....	2	74	7	53	86	166	176	17	1	5	587	1	....	..	...	....
Less rebuilt	6	....	....	....	....	....	....	....	....	1	....	15	...	77	129	....	1	..	223	1	....	..	....	....
To be rebuilt	....	....	....	....	....	1	...	....	2	73	7	38	86	89	47	17	....	4	364	....	....	..	....	....
Add serviceable and repairing	248	27	19	5	4	107	93	28	43	3,811	77	2,483	913	63	577	86	9	95	8,440	49	10	22	2	83
Total	248	27	19	5	4	108	93	28	45	3,884	84	2,521	999	152	624	103	9	99	8,804	49	10	22	2	83

MONCTON, June 30, 1901.

JOHN SUTTON,
Mechanical Accountant.

B.—INTERCOLONIAL RAILWAY.

STATEMENT of Locomotive and Car Mileage, Year ended June 30, 1901.

Months.	Locomotive Mileage.		Car Mileage.				Snow Ploughs.	Average Passenger.	Average Freight.
	Passenger.	Feight.	Passenger.	Express Postal and Baggage.	Freight.	Total.			
1900—July	180,270	323,032	813,231	379,865	4,256,878	5,449,974	....	6·62	13·18
August	186,061	316,109	878,368	380,239	4,382,448	5,641,055	....	6·76	13·87
September	176,310	309,636	851,898	355,562	4,418,224	5,625,684	....	6·85	14 27
October	172,617	367,600	780,234	368,852	5,003,912	6,152,998	500	6·66	13·61
November	162,101	348,642	719,521	349,061	4,676,900	5,745,482	1,690	6·59	13·41
December	156,637	393,734	670,575	338,653	5,208,476	6,217,704	5,275	6·45	13·23
1901—January	166,201	358,493	673,601	332,234	4,407,704	5,413,539	18,557	6·05	12 29
February	142,743	329,939	564,592	294,228	4,052,770	4,911,590	42,346	6·02	12·28
March	146,134	411,880	639,918	309,786	5,124,590	6,074,294	25,315	6·50	12·44
April	146,849	402,336	648,915	308,950	5,549,909	6,507,774	800	6·52	13·79
May	146,353	393,717	679,968	321,355	5,394,848	6,396,171	....	6·84	13·70
June	172,213	353,067	763,594	356,002	4,861,333	5,980,929	....	6·49	13·77
Total	1,954,489	4,308,185	8,684,415	4,094,787	57,337,992	70,117,194	94,483	6·54	13·31

JOHN SUTTON,
Mechanical Accountant.

MONCTON, June 30, 1901.

C.—INTERCOLONIAL RAILWAY.

ABSTRACT of Locomotive Return for Year ended June 30, 1901.

Months.	Hours in Steam.	Locomotive Mileage.	Consumption.				Average Consumption per 100 Miles.				
			Tons of Coal.	Pints of Oil.	Pints of Valve Oil.	Pounds of Waste.	Miles run to 1 hour in Steam.	Pounds of Coal.	Pints of Oil.	Pints of Valve Oil.	Pounds of Waste.
1900—July..........	60,169	624,859	18,694	24,485	11,194	13,463	10·38	67·01	3·92	1·79	2·15
August.......	59,489	619,506	19,083	22,931	11,406	13,010	10.41	69·00	3·70	1·84	2·10
September ...	59,553	606,692	19,394	22,423	10,817	12,269	10·18	71·61	3·69	1·78	2·02
October	68,624	681,128	22,417	22,979	11,891	12,479	9·92	73·72	3·38	1·75	1·83
November.....	68,418	656,033	22,901	22,760	11,469	12,142	9·59	78·19	3·47	1·75	1·85
December.....	76,776	714,466	27,438	26,101	13,192	13,357	9·30	86·02	3·65	1·85	1·87
1901—January . ..	69,768	668,636	25,423	26,150	11,770	13,498	9·58	85·17	3·91	1·76	2·02
February.	66,251	614,360	22,751	24,136	11,183	11,131	9·27	82·95	3·93	1·82	1·81
March........	74,996	709,917	26,065	28,943	13,399	13,062	9·46	82·24	4·07	1·89	1·84
April.	70,027	685,480	23,888	26,960	12,173	12,517	9·79	78·07	3·93	1·78	1·82
May........	65,799	671,840	21,194	25,370	11,246	10,516	10·21	73·06	3·78	1·67	1·56
June..........	64,791	656,380	21,210	24,266	11,960	10,344	10·13	72·38	3·69	1·82	1·58
	804,661	7,909,297	271,178	297,504	141,700	147,788	9·83	76·80	3·76	1·79	1·87

MONCTON, June 30, 1901.

JOHN SUTTON,
Mechanical Accountant.

D.—INTERCOLONIAL RAILWAY.

STATEMENT of Locomotive Power for each month from July 1, 1900, to June 30, 1901.

Months.	Miles run by Locomotives.	Mechanical Superintendent's Salary, Clerks and Office Expenses.	Enginemen's Wages.	Fuel.	Oil and Waste.	Repairs to Engines, Tenders, and Tools.	Water.	Engine Houses and Turn. tables.	Total.	Average per 100 Miles.							
										Mech'l Supt. Salary.	Wages.	Fuel.	Oil and Waste.	Repairs.	Water.	Engine Ho's & Turntab's.	Total.
1900.		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.								
July	624,859	1,467 35	36,143 85	51,102 22	2,454 40	37,208 73	2,912 51	1,450 54	132,739 60	·23	5·80	8·18	·39	5·95	·46	·23	21·24
August ...	619,506	1,420 89	36,658 67	69,808 67	2,248 12	40,925 74	3,664 71	1,851 39	156,578 19	·23	5·92	11·27	·36	6·61	·59	·29	25·27
September..	606,692	1,448 85	37,129 48	73,114 48	2,258 28	41,042 74	4,768 15	2,062 54	161,824 52	·24	6·12	12·05	·37	6·77	·79	·34	26·68
October.. ..	681,128	1,524 09	41,052 79	84,797 78	2,226 52	38,298 38	3,095 76	2,487 76	173,483 08	·22	6·03	12·45	·33	5·62	·45	·37	25·47
November..	656,033	1,541 61	40,313 20	88,160 90	2,287 53	41,285 89	6,950 31	2,656 90	183,196 34	·23	6·14	13·44	·35	6·29	1·06	·41	27·92
December..	714,466	1,540 86	43,152 53	102,604 25	2,917 97	38,845 55	6,026 98	4,248 65	199,336 79	·22	6·04	14·36	·41	5·44	·84	·59	27·90
1901.																	
January....	668,636	1,707 16	40,533 13	94,229 01	2,220 56	28,019 34	2,294 48	3,423 04	172,426 72	·26	6·06	14·09	·33	4·19	·34	·51	25·78
February ..	614,360	1,505 02	36,731 15	82,648 01	2,019 34	26,563 85	3,657 63	3,111 56	156,236 56	·25	5·96	13·45	·33	4·33	·60	·51	25·43
March.....	709,917	1,585 47	43,052 39	97,789 38	3,085 69	38,476 96	1,041 74	3,418 13	188,449 76	·22	6·07	13·77	·43	5·42	·15	·48	26·54
April..	685,480	1,477 52	38,557 38	82,102 40	2,070 50	27,889 70	2,750 84	2,605 20	157,453 54	·21	5·63	11·98	·30	4·07	·40	·38	22·97
May.......	671.840	1,515 39	38,757 13	76,786 08	1,886 42	27,892 41	911 02	2,618 84	150,367 29	·22	5·77	11·43	·28	4·15	·14	·39	22·38
June.....	656,380	1,539 39	36,652 44	70,125 65	1,347 74	26,677 98	681 39	1,870 72	138,895 31	·23	5·58	10·68	·21	4·07	·10	·29	21·16
Total.. ..	7,909,297	18,273 60	468,734 14	973,268 83	27,023 07	413,127 27	38,755 52	31,805 27	1,970,987 70	·23	5·93	12·30	·34	5.23	·49	·40	24·92

MONCTON, June 30, 1901.

JOHN SUTTON,
Mechanical Accountant.

E.—INTERCOLONIAL RAILWAY.

General Statement of the Expenses of the Mechanical Department Year ended June 30th 1901.

The miles run by trains	6,262,674	
„ engines	7,909,297	
„ cars	70,117,194	
„ snow ploughs	94,483	
	$	cts.
Cost of locomotive power	1,970,987	70
Cost of repairs to passenger cars	128,222	68
„ postal express baggage	31,493	24
„ freight cars and vans	326,075	62
„ snow ploughs and flanges	6,635	12
„ oil and waste for packing	7,498	40
	499,925	06
The cost of locomotive power per 100 miles run by trains	31	47
„ „ „ engines	24	91
„ „ „ cars and ploughs	2	80
The cost of repairs to cars and ploughs per 100 miles run by trains	7	86
„ „ „ engines	6	23
„ „ „ cars and ploughs		70
The cost of oil and waste for packing per 100 miles run by trains		12
„ „ „ engines		09
„ „ „ cars and ploughs		01
The cost of repairs to cars per 100 miles run by passenger	1	47
„ „ „ postal express baggage		76
„ „ „ freight cars and vans		56
„ „ „ ploughs and flanges	7	02

JOHN SUTTON,
Mechanical Accountant.

Moncton, N. B.
June 30, 1901.

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada on the

Date.	Time of Day.	Number of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1900.						
July 5..	13·30	....	Shunting	....	G. Hudson	123
" 10..	21·35	....	Special.	J. Langille	A. Purdy	44
" 13..	14·10	....	"	W. J. Ellis	W. Hanaway	183
" 14..	22·10	....	"	L. Bélanger	A. Matthews	224
" 16..	19·30	65	Accommodation	J. McDonald	A. Sproule	141
" 17..	25·35	16	Freight.	J. Hughes	J. J. Smith	177
" 17..	21·30	....	Shunting	....	C. Skinner	122
" 18..	17·25	33	Express	G. Johnston	J. Houston	125
" 21..	17·12	142	Accommodation.	A. Calder	J. Sproule	141
" 23..	....	....	Working.	A. A. McNeil	F. Satchell	178
" 24..	4·30	....	Shunting	....	F. W. Welling	118
" 28..	11·15	148	Accommodation	L. E. Proulx	G. Bégin	196
Aug. 3..	21·30	45	"	M. Audet	E. B. Price	135
" 7..	7·30	....	....	....	....	.....
" 10..	9·45	....	Shunting.	A. Arcand	H. Atkinson	96
" 19..	1·30	....	....	....	....	.....
" 25..	15·00	33	Express	W. A. Mitchell	R. Mitchell	173
" 29..	11·32	85	Accommodation	B. McLellan.	W. Wall.	157
Sept. 2..	14·50	....	Special.	B. Walker.	L. Boulet.	163
" 4..	9·00	....	Shunting	H. McDonnan.	A. R. Sutherland	49
" 11..	12·20	....	Special	H. B. Haines	J. McCallum	180
" 12..	15·00	....	"	A. J. Shanahan	W. Meach	165
" 13..	17·00	....	Working	W. F. Ferguson	D. Cool.	34
" 14..	7·00	....	Special.	J. S. Nickerson	A. Fryers	213
" 17 .	10·15	....	Shunting	J. J. Daley	J. Sterkall	25
" 17..	21·00	....	Special	E. O'Grady	J. Walsh.	209
" 21..	19·35	....	"	R. J. McNeil	J. Satchell	178
" 22..	5·00	....	"	G. A. McLeod	W. G. McDonald	182
" 22..	19·20	....	"	R. J. McNeil	J. Satchell	178
" 24..	10·02	....	"	G. M. Armstrong	J. Donald	52
" 26..	15·30	....	"	J. L. Barnhill	A. M. Stevens	86
" 26..	23·15	....	"	R. Hunter.	W. C. Hunter	221
Oct. 2..	9·30	126	Accommodation	J. J. Daley	J. Stockall	25
" 3..	7·00	....	....	....	....	.....

RAILWAY.

line of the Intercolonial Railway during the Year ended June 30, 1901.

Place of Accident.	Name of Person injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Sydney	J. W. Shaw	Neither	Struck by locomotive while walking on track.	Forehead badly cut.	
1½ miles east of Truro	N. Paul	"	Struck by train	Fatal	Accidental.
Truro	A. A. Fisher	Employee	While uncoupling engine	Hand slightly injured.	
Sayabec	L. Bélanger	"	While shunting	Fingers jammed.	
Lourdes	D. McNeil	Neither	Struck by train while walking on track.	Fatal	Accidental.
2 miles east of Springhill.	J. J. Smith	Employee	Train collided with light engine No 128.	Considerably injured.	
Halifax	P. Houlihan	"	While coupling cars.	" "	
2 miles west St. Cyrille.	Eloi Cote	Neither	Struck by train	Fatal	Accidental.
Westville, Main Street.	Mr. Connor and wife.	"	Crossing track with team struck by engine.	Slightly injured.	
River Denys	H. A. McDonald	Employee	While coupling cars.	Two fingers crushed.	
Moncton Yard	H. W. Briggs	"	While shunting	Fatal	Accidental.
St. Perpetue	F. Cyr	"	While unloading freight	Three fingers crushed.	
Near Millstream	Thos. Tait (tramp).	Neither	Stealing ride, foot caught between drawbar.	Foot badly crushed.	
Between Bic and Sacré Cœur.	Jos. Dupère	"	Found on track, supposed to have been struck by train.	Fatal	
Point Levis	J. T. Carrier	Employee	While shunting	Shoulder broken and chest hurt.	
Sydney	John Tobin	Neither	Found on track, supposed to have been struck by train.	Fatal	Accidental.
Chaudière Jct.	Wm. Lee	Passenger	Jumped from moving train.	Leg cut off. Since died.	Accidental.
Richmond	E. Coy	Employee	" " "	Slightly injured.	
2½ miles east of Ste. Flavie.	J. B. Bernier	Neither	Walking on track, struck by train.	" "	
Pugwash	W. Landry	Employee	Fell from car while shunting	Foot crushed	
Stewiacke	H. Biswanger	"	While signalling struck hand on a car on siding.	Hand injured	
North Sydney Wharf.	Jos. Bailey	Neither	Trying to board moving box car.	Arm injured	
Gloucester Jct.	A. Carrier	Employee	Fell from car	Considerably injured.	
Evans	J. S. Nickerson	"	Stuck knee on step of van while boarding train.	Knee dislocated.	
Near Mt. Hope Asylum.	J. Rayffe	Neither	Walking on track struck by train.	Slightly injured.	
Deep Water Terminus, Halifax	F. Racif	"	Stealing ride on brake beam.	Hands and face bruised.	
Grand Narrows	J. S. Campbell	Employee	While coupling	Arm broken	
¼ mile west of Bayfield.	H. Fraser	"	Engine collided with box car.	Seriously injured died.	Accidental.
McKinnon's Harbour.	W. Philpot	"	Fell from engine in motion.	Head cut.	
Fort Lawrence	Geo. Lutz	"	Fell between van and car of moving train.	Fatal	Accidental.
Valley	G. Dickie	"	While getting on train in motion.	Foot jammed.	
Painsec Jct.	C. J. McInnis	"	While coupling cars	Hand jammed	
Dartmouth	J. O'Donnell	Neither	Got between cars which were being shunted.	Foot jammed	
West Bay Road	D. McDonald	"	Found lying near track. Supposed to have fallen while intoxicated, his head striking on rail.	Head badly cut. Since died.	No inquest.

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada on the

Date.	Time of Train.	Number of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1899.						
Oct. 4..	P. M.	2	Express	W. Gunn	R. McDonald	62
" 11..	14·35	152	"	C. Rioux	T. Levesque	198
" 11..	23·40	85	Accommodation	J. Craigie	J. Collison	128
" 12..	7·15	....	"	....	W. E. Turner	39
" 14..	8·00	....	"	....	....	......
" 17..	10·30	....	....	....	....	......
" 17..	15·15	104	Freight	J. J. McNeil	J. McRury	133
" 18..	9·35	....	Working	D. Marquis	C. Mercier	38
" 18..	9·35	....	"	"	"	38
" 22..	6·15	7	Express	J. W. Coles	F. Whitney	55
" 27..	24·05	....	Special	J. J. Côté	S. Ferguson	28
" 29 .	9·20	487	Accommodation	H. McDormand	A. Sutherland	49
" 31 .	....	38	Freight	M. Cummings	D. McQuarrie	138
Nov. 1..	17·00	....	Special	W. A. Munn	D. Matheson	3
" 5..	2·00	....	"	A. Philips	W. R. Wheaton	176
" 7..	2·30	....	"	H. A. Baker	"	209
" 9..	....	....	Working	N. Ouellet	I. Bérubé	126
" 10..	4·20	....	Special	F. Côté	J. Dussault	37
" 10..	6·25	147	Accommodation	A. Legacé	J. Deboo	7
" 10..	20·00	....	Special	H. B. Hanes	R. Simpson	82
" 12..	5·30	....	....	....	J. Donald	52
" 13..	8·30	....	Shunter	R. Cummings	J. McEachern	161
" 14..	1·10	....	Special	P. Tardif	W. Kelly	5
" 15..	10·25	....	....	....	W. J. Hunter	94
" 19..	9·00	19	Express	W. H. Donkin	H. McAulay	82
" 19..	16·45	....	....	A. Arcand	F. Cloutier	96
" 19..	22·35	66	Express	J. McDonald	T. Scott	185
" 20..	12·00	....	....	R. Cummings	D. Yould	95
" 21..	15·30	....	Working	D. Hanes	C. Cool	84
" 22..	11·10	....	Special	E. Perron	J. Dion	170
" 24..	18·30	....	"	R. J. McNeil	John Gayley	178
" 27..	3·30	143	Accommodation	F. Dumond	O. Jolivet	198
" 27..	5·40	....	Working	A. Arcand	H. Atkinson	103
" 27..	14·00	....	Special	J. Roger	A. Cornell	217
" 27..	21·00	57	Freight	J. B. Pollard	B. Peterson	27

RAILWAY.

line of the Intercolonial Railway during the Year ended June 30, 1901—*Continued.*

Place of Accident.	Name of Persons injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Between Springhill Jct. and Salt Springs.	J. Eagles	Neither	Struck by train while walking on track.	Slightly injured.	
2 miles East of Montmagny.	J. Cote	"	Crossing track with team. Struck by train.	Leg sprained	
McIntyre's Lake	J. Collison	Employee	Train run off track at switch.	Face and arm cut.	
Vinet Street Montreal.	G. Carrigan	Neither	Struck by engine	Fatal	Accidental.
2½ miles west Windsor Jct.	P. Redmond	"	Found on track supposed to have been struck by train.	Seriously injured	
Pictou yard	W. McMaster	Temp. empl.	Fell from top of refrigerator car while loading ice.	Legbroken, ankle and wrist hurt.	
McIntyres Lake.	D. McNeil	Employee	Fell from pilot of moving engine.	Leg broken and cut.	
Old Tartagne	J. Michaud	"	Train collided with handcar of rails throwing van over the bank.	Head hurt, rib broken and side arm and leg burnt.	
"	D. Sabry	"	" "	Slightly injured.	
Sussex	W. C. Price	"	While coupling	Finger injured.	
Moose Park	F. Fergnes	"	"	Finger cut off.	
Pugwash	J. Hay	"	Slipped from pilot of engine while shunting	Fatal	Accidental.
Charlo	L. Vye	"	While shunting	Hand injured.	
Shenacadie	S. McPherson	"	Fell from car while shunting	Head cut, body bruised.	
New Glasgow	D. R. Ross	"	While helping to coal engine	Ankle injured.	
Stellarton.	A. Thorpe	"	While coupling	Hand crushed and broken.	
River du Loup	E. Pouze	"	"	Hand jammed.	
Ceston Junction.	F. Côté	"	Special train ran into rear of train.	Shoulder and leg slightly hurt.	
St. Lambert	— Trudeau.	Neither	Struck by train while walking on track	Slightly injured.	
Stellarton.	C. Davis	Employee	While coupling	Thumb taken off.	
Moncton yard	J. McAuley	"	Fell from moving engine	Arm broken.	
Truro	I. Glenfield	"	While coupling	Finger jammed.	
Drummondville.	W. Atkinson	"	Fell in tender of engine	Considerably injured.	
St. John	Geo. McBraid	"	Fell under car wheels while shunting	Fatal	Accidental.
Near West River	John C. Fraser	"	Trying to board train in motion	"	"
Near Lévis	Montininy (boy).	Neither	Walking on track struck by engine.	Considerably injured.	
Near Pictou	E. Munn	"	Struck by moving train	Fatal	Accidental.
Truro	W. D. Nelson	"	Crossing between cars, foot caught between drawbars	Foot injured.	
Nigadoo	C. W. Aubie	Employee	A man with tie on his shoulder fell the tie hitting Aubie on nose	Nose injured.	
Ste. Anne	O. Langlois	"	Fell between engine and tender	Slightly injured.	
Shenacadie	L. A. Merrison	"	Fell into cattle guards	Nose broken.	
Cap St. Ignace	L. Vaillancourt.	"	Train collided with special backing out of siding.	Legs slightly injured.	
Pt. Lévis	A. Laliberté	"	While coupling cars	Fingers jammed.	
Millstream	J. Martin	"	Struck his head against door facing	Forehead cut.	
Truro	H. Kent	Neither	Crossing between cars, foot caught between drawbars	Foot injured.	

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada on the line

Date.	Time of Day.	Number of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1900.						
Nov. 28..	5·20		Special	E. Perron	G. Lamothe	194
" 28..	15·30		Working	D. Hanes	C. Cool	84
" 29..	11·30	56	Freight	B. McLennan	J. Wall	27
" 30..	7·30		Special	G. A. McKay	J. Gunning	60
" 30..	7·30	143	Accommodation	E. Camire	A. Jolivet	81
Dec. 4..	4·50	56	Freight	J. Holmes	A. Grant	26
" 7..	8·40		Special	D. McKenzie	A. Purdy	11
" 8..	16·10	1	Express	W. Kelly	C. McCarthy	184
" 8..	21·45		Special	J. Wilson	St. Amand G. Côté	77 200
" 13..	1·30		Shunting		B. Johnson	44
" 13..	13·45		Special	H. A. Baker	P. O'Toole	209
" 14..	13·20	152	Express	M. Marchessault	G. Findlay	61
" 17..	15·45		Special	H. A. Baker	E. Kennedy	145
" 18..	2·00		"	W. J. Ellis	J. Hayward	177
" 18..	8·00		"	J. W. Coles	W. Smallwood	179
" 18..	17·00					
" 22..	23·31			A. A. McNeil	B. Titus	178
" 24..	15·45	26	Express	D. McQuarrie	H. Tait	164
" 25..	14·40	129	Accommodation	A. H. Hayman,	J. Stockall	60
" 28..	7·30		Shunting		J. Ferguson	67
" 31..	9·00				J. McDowell	20
1901.						
Jan. 3..	24·00		Special	J. Beaulieu	A. Connell	215
" 7..	15·15		"	J. T. McDonald	J. Joncas	208
" 7..	16·30		Shunting		Jas. Coles	118
" 10..	11·35		Special	J. J. Côté	J. Bruce	195
" 12..	7·55	148	Accommodation	L. E. Proulx	J. O. LeBel	195
" 12..	13·20		Special	J. T. McDonald	W. Atkinson	208
" 12..	16·30		"	W. A. Munn	H. Scothorn	130
" 14..	14 10		"	A. Bonneau	J. DeBoo	193
" 15..	9·10		"	J. T. McDonald	J. Joncas	210
" 15..	17·30		"	J. Tardiff	J. Collet	115
" 17..	11·15		"	I. L. Barnhill	A. M. Stevens	209
" 17..	11·30	42	Freight	V. Carmel	E. B. Price	17
" 19..	11·30		Shunting		H. Thompson	124
" 24..	2·30		Special	J. Langille	A. Stevens	209
" 24..			"	J. Mahoney	W. R. Wheaton	91
" 24..			"	"	"	91
" 25..	21·45				W. G. McDonald	123

RAILWAY.

of the Intercolonial Railway during the Year ended June 30, 1901—*Continued.*

Place of Accident.	Name of Person injured.	Whether Passenger or Employee.	Particulars of Accidents.	Extent of Injury.	Verdict of Coroner's Jury.
St. Fabien	J. Lebel	Employee	While coupling	Fingers jammed.	
2 miles west of Eel river.	C. Bulley	"	While unloading rails	Hand hurt.	
New Glasgow	C. Conrod	"	Slipped while coupling	Sprained ankle.	
Near James Riv.	A. M. Fraser	"	Fell from moving train	Head cut, foot crushed.	
Lévis	J.B. L'Heuvreau	"	While coupling cars	Wrist hurt.	
Mulgrave	A. F. O'Neil	"	Found on track, supposed to have been struck by No. 56 train.	Head badly cut. Since died.	
Healturton	A. McDonald	"	While coupling	Jaw broken.	
Salisbury	Mrs. Duff	Neither	Struck by train while crossing track.	Leg broken otherwise injured. Since died	No inquest.
½ mile west of Cap St. Ignace	N. Belanger	Passenger	Train left track	Leg and face injured.	
Truro	J. Hill	Employee	While coupling	Finger broken	
Oxford Junction	W. Marr	"	"	Hand jammed	
1 mile west of Hadlow.	Marie Anne Dussault.	Neither	Struck by train	Fatal	Accidental.
Thomson	H. Gould	Employee	While coupling	Hand jammed	
Belmont	C. Lardigan	"	While shunting	Leg injured.	
Sussex	J. W. Horseman	"	"	Finger jammed	
Moncton	S. Duff	"	While unloading rails	Leg broken.	
Point Tupper	N. McDonald	"	Fell while entering van	Ribs broken	
2 miles west of Penobsquis.	R. Whitenect	Neither	Struck by train while walking on track.	Fatal	Accidental.
Dartmouth	C. F. Brunt	Employee	While shunting	Hand hurt, amputation necessary.	
Pictou Yard	S. Landry	"	Foot caught while shunting	Fatal	Accidental.
Truro	F. Conley	"	While coupling	Two ribs fractured.	
2 miles west of Metapedia.	J. Gagnon	"	Train broke in three pieces.	Slightly injured.	
North Sydney Junction.	J. Benoit	"	While coupling	Finger and part of thumb cut off.	
Moncton	A. Bishop	"	"	Fingers jammed.	
St. Romuald Bridge.	J. J. Côté	"	Jumped from train near bridge.	Seriously hurt, since died.	Accidental.
St. Rosalie	J. A. Boisvert	"	Fell from moving train	Arm and leg hurt	
Near McKin'on's Harbour.	M. McKinnon	"	Hand car struck by train	Slightly injured.	
½ mile west of Iona.	Mary McNeil	Neither	Struck by train while walking on track.	Fatal	Accidental.
St. Leonard Junction.	J. DeBoo	Employee	Gauge glass breaking	Hand cut.	
North Sydney	J. J. Ryan	"	While shunting	Head jammed	
Ste. Rosalie Jct.	F. Carrier	"	"	Two fingers cut off.	
Oxford Junction	B. Pickrem	"	"	Finger injured	
Ste. Flavie	P. Desrosier	"	While coupling	Hand jammed	
Mulgrave	L. McEachern	"	While shunting	Hand jammed, finger cut off.	
Albion	C. Landigan	"	While coupling	Finger smashed.	
½ mile west of W. Merigomish.	W. R. Wheaton.	"	Train ran in washout	Fatal	Accidental.
" "	Jas. Blackwood.	"	" "	"	
Lorway's Siding, Sydney.	P. Keys	"	Standing on top of car, struck by overhead bridge.	Forehead, eye and lip cut.	

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada on the

Date.		Time of Day.	Number of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1601.							
Jan.	25..	21·50	151	Express	A. Bouchard	W. Turner	61
"	29..	16·45		Special	R. W. Orchard.	E. Thomas	215
"	31..	12·00		"	J. Langille	T. McCallum	177
"	31..	19·50				Geo. Spear	127
Feb.	1..	16·00				J. Ferguson	48
"	4..	21·50				J. McLellan	57
"	5..	9·50	1	Express	W. Gunn	J. Hunter	63
"	11..	9·25	45	Accommodation	J. Guay	E. Parsons	116
"	12..	13·55	128	"	J. J. Daley	J. Stockall	43
"	13..						
"	14..	13·05	31	Express	J. McFadyen	J. H. Moore	57
"	14..	16·00				T. O'Brien	16
"	14..	9·30				W. Meach	165
"	14..					A. McGrath	2
"	19..	15·00					
"	20..	21·00				C. McHugh	118
"	22..	19·30		Special	G. A. McKay	J. Sproull	85
"	23..	16·00				J. McDermott	18
"	23..	18·00				J. Labonté	117
"	24..	21·30			J. Michaud	A. McConnell A. J. McDonald	17 209
"	25..	15·00			A. Dumas	C. J. Levesque	205
"	25..	23·00				M. F. O'Brien	127
Mch.	4..	17·00		Special	J. W. Coles	W. E. Hunter	177
"	4..	15·30				G. Spear	68
"	4..					F. Cloutier	97
"	5..	2·10			A. J. Shanahan	W. Atkinson	130
"	5..	3·40				N. Purris	27
"	7..	15·00			G. N. Armstrong	T. Hennessy B. Johnson	36 131
"	8..	19·35			W. A. Warman	H. Cameron	46
"	9..		42	Freight	M. Audet	E. B. Price	135
"	11..	8·30	148	Accommodation	L. E. Proulx	S. Ferguson	39
"	11..	15·30				O. Veilleux	116
"	11..	15·38	97	Express	W. Clark	A. Palmeter	8

RAILWAY.

line of the Intercolonial Railway during the Year ended June 30, 1901.—*Continued.*

Place of Accident	Name of Person injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner' Jury.
St. Hyacinthe Bridge.	A. Sicard.	Passenger	Fell off train into river	Fatal	Accidental.
Campbellton	J. DeGrace	Employee	Slipped on ice and fell on rail.	Knee cut	
Springhill	I. B. Archibald.	"	While shunting	Foot jammed	
Moncton	H. Langhly	"	While coupling	Finger jammed	
Pictou	W. Heighton	"	"	Hand injured	
Richmond	F. Druhan	"	Fell from box car while shunting.	Arm broken, otherwise hurt.	
Truro	D. Bartlett	"	Struck by train backing to platform.	Hand bruised	
St. André	Miss Levesque	Passenger	Jumped from moving train.	Knees hurt	
Windsor Junct.	C. E. Conrod.	Employee	While coupling	Hand crushed	
Lorway's Crossing, Sydney.	McLeod (Deaf Mute).	Neither	Supposed to have been struck by train.	Seriously injured, since died.	No inquest.
Dorchester Road	Squaw	"	On track intoxicated, struck by train.	Head cut	
Richmond	C. Wagstaff	Employee	While coupling	Finger jammed	
North Sydney	F. O. Moffatt	"	Fell while getting off moving engine.	Leg and arm hurt	
Richmond	J. Heffler	Employee	Struck by engine, while trying to get on it.	Slightly injured.	
"	J. W. Burton	"	Struck by lever while working at semaphore.	" "	
Moncton Yard	S. C. Tuttle	"	While coupling	Hand jammed	
New Glasgow	H. D. Hatty	"	" "	Body "	
Moncton	C. Grass	"	Trying to get car on track	Finger taken off.	
Rivière du Loup	J. Roussel	"	While coupling	Fingers crushed.	
Ste. Flavie	J. Martin	"	" "	Finger "	
	J. Raymond	"	Scraper fell from top of tender and struck him.	Head hurt	
Near Ste. Flavie.	M. Beaulieu	Neither	Crossing track with team, struck by train.	Slightly injured.	
Moncton Yard	H. W. Laughey.	Employee	Load of fence material shifted; catching hand between load and brake wheel.	Hand jammed	
Memramcook	E. McRelvie	Neither	Jumped from moving van and fell under.	Fatal	Accidental.
Moncton Yard	T. M. Le Blanc.	Employee	While working under car shunter struck same.	Neck cut, ribs broken and chest injured.	
Lévis Yard	J. B. L'Heureux	"	Coupling cars	Hand slightly injured.	
Orangedale	D. F. McRinnon	"	While shunting	Hand smashed	
Truro	P. Leonard	"	" coupling	Hand jammed	
Onslow Grade	J. Frizzle	"	Struck by piece of deal falling from car.	Slightly injured.	
NewCastle	Geo. Chiventon.	"	While shunting	Finger slightly hurt.	
Near Cedar Hall	W. B. McGovern	"	Slipped off engine and under cars.	Foot injured. Amputation necessary.	
St. Hyacinthe	L. Begin	"	While shunting	Two fingers crushed.	
Hadlow	W. Dubois	"	Engine backing in shop struck him.	Foot injured. Amputation necessary	
Windsor Jct.	J. Johnson	"	Fell while jumping from moving train.	Head injured	

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada on the line

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1901.						
Mch. 11..	22·50		Special	W. V. Bovard	J. Stockford	218
" 12..	7·20			G. A. McKay	S. Black	178
" 12..	10·00	34	Express	E. McKenna	J. Cameron	167
" 15..	20·40		Special	J. B. Sirois	G. Coté	183
" 19..	9·00				D. Boucher	126
" 19..	15·40				H. Camerön	69
" 19..	24·45			G. Lamkie	P. McKenna	140
" 24..	18·45			S. M. Armstrong	F. Welling	88
" 25..	16·50			J. F. Kelly	J. H. Shaw	10
" 30..		33	Express	D. R. Hunter	W. Gross	149
Apl. 1..	16·00				J. W. Coles	35
" 2..	9·40		Special	W. F. Ferguson	C. Freeze	235
" 3..	21·30					
" 3..	19·15				G. Roberge	126
" 3..	16·30			L. S. Poulet	F. Cloutier	31
" 8..	2·15		Shunter	D. Laplante	C. Mercier	215
" 13..	8·30				J. McDowell	23
" 13..	19·00				J. Walsh	89
" 20..	21·45				W. J. Hunter	189
" 22..	20·30		Working	A. Arcand	E. Huot	14
" 23..	9·30		Special	J. McDonald	A. Fogo	206
" 23..	22·28	33	Express	A. McLellan	E. S. White	70
" 26..	16·50				H. Scothorn	122
" 28..	2·50	76	Freight	N. Letarte	J. Callet	195
" 29..	6·50	2	Express	W. Kelly	T. W. Prince	150
" 30..	9·50	20	"	W. H. Donkin	H. McAuley	159
May 1..	21·00		Special	G. Lamkil	A. Wood	228
" 8..	7·30	148	Accommodation	F. Côté	T. Dussault	1
" 9..	1·45	52	"	E. L. Watts	J. Oakley	17
" 10..	10·00					
" 11..	4·30				E. Price	41
" 16..	21·55		Special	A. Cameron	D. Matheson	8
" 18..	4·30	75	Freight	S. Bernier	A. Connell	218
" 20..	13·40	147	Accommodation	C. Couchy	W. Turner	171
" 23..	9·00				H. Coms	A
" 24..	13·30		Special	J. W. Coles	J. Moody	217

RAILWAY.

of the Intercolonial Railway during the Year ended June 30, 1901—*Continued.*

Place of Accident.	Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Newcastle	G. E. Powers	Employee	Struck by passing special while shunting.	Foot injured	
Glengarry	D. W. Chisholm.	"	Coupling engines to cars	Fatal	Accidental.
Near Metapedia.	F. Loy	Neither	Walking on track struck by train.	Elbow slightly injured.	
Chaudière Jct.	G. Coté	Employee	While making fire in his engine.	Face and hands burned.	
" "	A. Demers	"	While shunting.	Foot sprained	
NewCastle coal shed.	H. Cameron	"	Fell through trestle	Head injured	
Coal Branch	H. Hachey	"	Fell from top of car.	Slightly injured.	
Springhill	F. L. Fillmore	"	While shunting.	Foot jammed	
1 mile west Har. au Bouche.	E. Fougère	Neither	Walking on track struck by train.	Fatal	Accidental.
Near Berry's Mills.	Corporal McCullough.	Passenger	Fell from moving train	Seriously injured	
Moncton Yard	H. Purrington	Employee	While coupling.	Finger jammed	
New Mills	J. Cumming's	"	Head struck by telegraph signal while looking out of window.	Head injured	
Moncton	H. Weatherbee	Neither	Found lying on track. Supposed to have been struck by train.	Fatal	Accidental.
Chaudière Jct.	O. Cantin	Employee	While shunting	Finger jammed	
Chaudière curve.	B. Therrien	"	" "	Two fingers crushed.	
Rivière du Loup.	J. Levesque	"	Fell from, top of car while shunting.	Head hurt	
Truro Yard	O. McLaughlin	"	While coupling	Shoulder and breast hurt.	
Truro	S. Musgrove	"	While changing draw bar in cars.	Seriously hurt. Since died.	No. Inquest.
St. John	J. L. Conlon	Employee	While shunting	Hand smashed	
Hadlow	O. Langlais	"	" coupling	Finger smashed.	
Shenacadie	A. McDonald	"	" shunting	Finger taken off.	
2 miles East Kent Junction.	J. B. Cameron.	"	Fell from moving train	Not seriously injured.	
Point Tupper	N. McLean	"	While coupling cars.	Body jammed	
Between Aston Jct. and St. Leonard Jct.	J. Dean	"	Gauge glass breaking.	Hand slightly cut	
St. John	J. Petrie.	"	While coupling cars.	Collar bone broken and side injured.	
Mulgrave.	J. Jellows	"	" "	2 fingers taken off	
Hamilton Siding	H. J. Culligan	"	Stepped on nail	Foot injured	
Riv. du Chene	L. Baron.	Passenger	Jumped from moving train	Leg broken	
Dalhousie Jct.	E. L. Watts	Employee	Stepped on stone while shunting.	Ankle sprained	
Dickie's MillSiding.	S. Totton	Neither	Jammed between cars at Wood Chute.	Fatal	Accidental.
Ste. Flavie	A. Fornier	Employee	While trying to get on engine.	Foot jammed	
Scotch Lake	P. Hogan	"	Struck by chute while placing cars under same.	Fatal	Accidental.
Near Metapedia.	R. McBeath	"	Run over by train while lying on track.	"	
St. LeonardBridge.	R. Champagne.	Neither.	Struck by train while walking on track.	Leg and head slightly hurt.	
St. John Yard	W. Needham	Employee	While coupling cars.	Hand crushed	
Near Painsec Jct	F. W. Perkins	"	Fell while walking over train.	Knee injured	

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada on the line

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1901.						
May 25..	15·45				A. McLeod	175
" 25..	20·40	66	Express	J. McDonald	A. Sproull	49
" 29..	13·13	35	"	W. McClafferty	C. Atkinson	232
June 2..	2·10		Special	H. A. Baker	J. Kennedy	60
" 10..	9·00		"	A. McNeil	A. Fogo	8
" 12..	9·15				R. J. Jefferson	92
" 15..	15·00				S. Martin	122
" 16..	2·30				C. Skinner	191
" 22..	14·00				D. Matheson	75
" 23..	23·15			A. Gamache	W. Savidant	229
" 24..	7·30			H. G. Thompson	W. J. Coffey	225

GENERAL MANAGER'S OFFICE,
MONCTON, N.B., October 3, 1901.

RAILWAY.

of the Intercolonial Railway during the Year ended June 30, 1901—*Concluded.*

Place of Accident.	Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Sydney	T. B. Spencer	Employee	While coupling cars	Hand crushed	
New Glasgow	H. McGregor	Neither	Struck by train at crossing.	Fatal	Accidental.
Near Humphery's.	I. Dupont	"	Struck by train while walking on track.	"	"
Windsor Jct	P. Houlihan	Employee	Struck by engine	Head hurt	
North Sydney Junction.	R. A. McDonald	"	Jumped off engine	Back injured	
Stellarton	H. Murray	"	Run over while working under car.	Fatal	Accidental.
Point Tupper	F. McPherson	"	While shunting	Ankle sprained	
Richmond	C. Steele	"	Fell while stepping from one car to another.	Arm injured	
Sydney	G. Downing	"	While shunting	Thumb crushed.	
Little Metis	A. Gallant	"	Struck by side rod of engine while sanding rail.	Head slightly cut	
Amherst	F. H. Griffiths	"	Fell between cars while shunting.	Leg crushed amputation necessary.	

WINDSOR BRANCH RAILWAY.

Office of the General Manager of Government Railways,
Moncton, N.B., September 21, 1901.

Sir,—I have the honour to submit the following statement showing the results of the working of the Windsor Branch Railway for the year ended June 30, 1901.

No. 1. Revenue account.

No. 2. Maintenance of way and works.

No. 3. General balance.

No. 4. Statement of earnings.

I also send you the report of the Engineer of Maintenance on the condition of the permanent way and works.

This line, 32 miles in length, was operated during the year by the Dominion Atlantic Railway Company on the same terms as last year, the company being allowed to retain two-thirds of the gross earnings, the balance, one-third, being paid over to the government, the latter maintaining the line.

The gross earnings were about the same as last year, as follows :—

Earnings 1899-1900	$47,351 43
Earnings 1900-01	47,261 89
Difference	89 54

The earnings from passenger traffic increased $830.69, and the earnings from freight traffic decreased $916.55.

The permanent way and works have been well maintained, and are in good order.

I have the honour to be, sir,

Your obedient servant,

D. POTTINGER,

General Manager Government Railways.

Collingwood Schreiber, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Railways and Canals.

OFFICE OF THE ENGINEER OF MAINTENANCE,
MONCTON, N.B.

SIR,—I have the honour to submit herewith the report of the Maintenance of the Windsor Branch for the year ending June 30, 1901.

TRACK.

During the past year 563 feet of 4½-inch rails, which had the ends worn, have been taken up out of the main line, cut, and relaid.

TIES.

8,471 ordinary ties, and 5 sets of switch ties, have been renewed during the year.

BALLASTING.

There was not any ballasting done during the past year.

SEMAPHORES AND SWITCHES.

Switches were renewed at the following stations, and sidings : Mount Uniacke, Panhook, and Chappelle. Repairs were made to all other switches and signals, where found necessary. A new station telegraph signal was put up at Newport.

SIDINGS.

During the year additional siding accommodation to the extent of 560 feet was provided.

FENCING.

1,188 rods of woven wire was erected on the branch during the year, and existing fences overhauled and repaired.

AT BEAVER BANK.

A new pitch and gravel roof was put on freight house.

AT ELLERSHOUSE.

Repaired cattle pen, and passenger platform, also shingled roof of station.

AT MOUNT UNIACKE.

The freight house was repaired, passenger platform was repaired, and new sills were put under the station.

AT NEWPORT.

Built a new cattle pen, also rebuilt freight house platform, 40 feet by 12 feet.

AT HARTVILLE.

Built a shelter over passenger platform, repaired reservoir at Newport tank.

BRIDGES AND CULVERTS.

At Wilkins and Cow bridges near Windsor, drove 20 piles, and made necessary repairs.

GENERAL.

Put hard pine stringers under track scale at Windsor, new plank top, and built new masonry piers.

Put up 15 new farm gates, and made repairs to others where necessary.

Six new sign boards were put up on stations between Windsor and Windsor Junction.

I have the honour to be, sir,
Your obedient servant,

T. C. BURPEE,
Engineer of Maintenance.

J. E. PRICE, Esq.,
General Superintendent,
Moncton, N.B.

DR. CR.

No. 1.—WINDSOR BRANCH RAILWAY.

REVENUE ACCOUNT, Year ended June 30, 1901.

Previous Year.	Expenditure.	Year ended June 30, 1901.	Previous Year.	Earnings.	Year ended June 30, 1901.
$ cts.		$ cts.	$ cts.		$ cts.
12,891 56	Maintenance way and works....	16,862 66	16,003 91	Passenger traffic..	16,834 60
34,459 87	Balance.................. ..	30,399 23	30,195 68	Freight traffic.....	29,279 13
			1,151 84	Mails.	1,148 16
47,351 43		47,261 89	47,351 43		47,261 89

E. & O. E.
MONCTON, N.B., June 30, 1901.

T. WILLIAMS,
Chief Accountant and Treasurer.

No. 2.—WINDSOR BRANCH RAILWAY.

MAINTENANCE OF WAY AND WORKS, Year ended June 30, 1901.

Previous Year.	——	
$ cts.		$ cts.
9,551 69	Repairs to track..................	9,328 30
1,058 27	Rails and fastenings..................	1,306 78
714 06	Ties..................	2,173 59
7 60	Bridges..................	651 00
14 58	Signals..................	49 81
183 82	Culverts, cattle guards, &c..................	169 14
28 40	Wharf at Windsor..................	34 15
322 40	Buildings and platforms..................	1,342 42
....	Hand cars and trollies,..................	74 00
187 14	Removing snow and ice..................	354 11
156 67	Tools and repairs of same..................	205 05
200 74	Fencing..................	639 61
445 49	Accountant's office and expenses..................	488 52
21 70	Miscellaneoue..................	46 18
12,891 56		16,862 66

E. & O. E.
MONCTON, N.B., June 30, 1901.

T. WILLIAMS,
Chief Accountant and Treasurer.

No. 3.—WINDSOR BRANCH RAILWAY.

GENERAL BALANCE, Year ended June 30, 1901.

Dr. Cr.

		$ cts.			$ cts.
1901. June 30.	To Stores	2,054 54	1901. June 30.	By Dominion Accounts	2,195 58
	Old Rails	141 04			
		2,195 58			2,195 58

E. & O. E.
MONCTON, N.B., June 30, 1901.

T. WILLIAMS,
Chief Accountant and Treasurer.

No. 4.—WINDSOR BRANCH RAILWAY.

MONTHLY STATEMENT OF RECEIPTS, ONE-THIRD EARNINGS.

Month.	Passenger Traffic.	Freight Traffic.	Mails.	Totals.
1900—July	1,792 99	2,300 18	95 68	4,188 85
August	2,457 67	1,697 73	95 68	4,251 08
September	2,772 67	2,986 04	95 68	5,854 39
October	1,636 73	3,741 65	96 91	5,475 29
November	1,120 31	3,359 98	96 90	4,577 19
December	1,098 95	2,624 73	96 91	3,811 59
1901—January	985 46	2,207 45	94 45	3,287 36
February	677 88	1,754 83	94 45	2,527 16
March	913 26	2,355 05	94 46	3,362 77
April	996 54	2,152 74	95 68	3,244 96
May	1,066 78	2,054 77	95 68	3,217 23
June	1,324 36	2,043 98	95 68	3,464 02
	16,834 60	29,279 13	1,148 16	47,261 89

E. & O. E.
MONCTON, N.B., June 30, 1901.

T. WILLIAMS,
Chief Accountant and Treasurer.

PRINCE EDWARD ISLAND RAILWAY.

Office of the General Manager of Government Railways,
Moncton, N.B., September 20, 1901.

Sir,—I have the honour to submit the following report on the working of the Prince Edward Island railway, for the fiscal year ended June 30, 1901.

I inclose the report of the superintendent, including statements of the various accounts.

The mileage of railway in operation was 209 miles, one mile less than last year, this is due to the reducing of curves between Loyalist and Colville stations.

The expenditure on capital account during the year was $280,173.93. This was chiefly for the construction of the Murray Harbour branch and of the Hillsborough bridge.

There is also included in it, a considerable amount for relaying the track with steel rails and for rolling stock.

The total cost of the railway on June 30, 1901 was $4,123,827.21.

The working expenses for the year were	$261,766 24
The gross earnings were	193,883 48
Deficiency	$ 67,882 76

The business done by the railway was good, and the earnings increased $19,144.75 over the previous year.

The increase of earnings was in both freight and passenger traffic.

There was an increase of working expenses of $40,834.43, due to the increased price of fuel and other stores, to increase of wages, and to the great cost of clearing the track of snow and ice last winter.

A large amount of work was done in the maintenance and repair of the track, buildings, bridges, fences and wharfs, and these are in good order.

The rolling stock received necessary repairs, and is in a state of efficiency.

Last winter was stormy, and considerable difficulty was experienced in keeping the track clear of snow and ice, and the expense of this was much more than usual.

Mr. E. Tiffin was appointed Traffic Manager, January 19, 1901, and he took charge of the Freight and Passenger Traffic Departments on January 21, 1901.

I have the honour to be, sir,
Your obedient servant,

D. POTTINGER,
General Manager, Government Railways.

Collingwood Schreiber, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Railways and Canals, Ottawa, Ont.

PRINCE EDWARD ISLAND RAILWAY.

Superintendent's Office,
Charlottetown, P.E.I., August 26, 1901.

Sir,—I have the honour to submit the following report on the working of the Prince Edward Island Railway for the fiscal year ended June 30, 1901 :—

I also inclose the following statements prepared by the accountant and auditor and the mechanical accountant and storekeeper :—

No. 1. Capital account.
2. Revenue account.
3. Locomotive power (abstract No. 1).
4. Car expenses (abstract No. 2).
5. Maintenance of ways and works (abstract No. 3).
6. Station expenses (abstract No. 4).
7. General charges (abstract No. 5).
8. General store account.
9. General balance.
10. Comparative statement of averages.
A. Monthly statement of the cost of locomotive power.
B. Statement of performance and consumption of locomotives.
C. Monthly statement of car mileage.
D. Statement showing number of locomotives, cars, snow ploughs and flangers.
E. Comparative statement of the expenses of the mechanical department.

The mileage of the railway in operation is 209 miles, one mile short of last year, on account of the removal of several curves.

CAPITAL ACCOUNT.

The total expenditure to June 30, 1900, was	$3,843,653 28
The additions during the year were as follows :—	
Hillsborough bridge	92,028 43
Murray Harbour branch	115,663 88
Steel rails	54,000 00
Rolling stock	10,000 00
Reducing curves	2,989 10
To provide new machinery	3,493 01
Increased accommodation at Cardigan	1,999 51
Making the total cost on June 30, 1901	$4,123,827 21

Hillsborough Bridge.—Mr. M. J. Haney has the contract for the piers and approaches of this, and the work is progressing.

Murray Harbour Branch.—Mr. Willard Kitchen has the contract for this work, about twelve miles of which are nearly all graded, and the balance under construction. Twenty platform cars and twenty box cars were built and charged to this branch. Two locomotives were purchased from the Kingston Locomotive Works, and included in this account.

Steel rails.—2,587 tons of steel rails were purchased from the Intercolonial Railway. (Further particulars are given under the head of 'Track.')

Rolling Stock.—Two passenger coaches and one second-class car were built at the works at Charlottetown.

Reducing curves.—Particulars are given under the head of 'Track.'

New Machinery.—One double surface wood planer, one mortiser and boring machine, one buzz planer, one iron working lathe, one steam hoisting engine, and eight jack screws were added to the works at Charlottetown.

Increased accommodation at Cardigan.—The freight shed at Cardigan was extended thirty feet, and a dwelling was furnished the station master.

REVENUE ACCOUNT.

The earnings from passengers and freight show a very substantial increase as compared with previous years. The crops were good, and the cheese factories and creameries appear to have increased their output. The live stock business is showing signs of improvement and promises well for the future. Trade in general has been good throughout the whole province.

The gross earnings and working expenses for the year compare as follows :—

Gross earnings	$193,883 48
Working expenses	261,766 24
Deficit	$ 67,882 76

The gross earnings compare with the previous year as follows :—

In 1900-1901	$193,883 48
1899-1900	174,738 73
Increase	$ 19,144 75

The earnings from passenger traffic compare as follows :—

In 1900-1901	$ 78,689 73
1899-1900	72,998 42
Increase	$ 5,691 31

The earnings for freight traffic compare as follows :—

In 1900-1901	$ 97,425 85
1899-1900	83,627 41
Increase	$ 13,798 44

The earnings from mails and sundries compare as follows :—

In 1900-1901	$ 17,767 90
1899-1900	18,112 90
Decrease	$ 345 00

The number of passengers carried compare as follows :—

In 1900-1901	157,793
1899-1900	147,471
Increase	10,322.

The weight of freight carried compares as follows :—

In 1900-1901	73,696
1899-1900	62,227
Increase	11,469

WORKING EXPENSES.

The working expense compare as follows with the previous year :—

In 1900-1901	261,766 24
1899-1900	220,931 81
Increase	$ 40,834 43

This increase is wholly due to the increased price paid for fuel, the increase in salaries and wages, the cost of relaying rails, and the large expenditure incurred in clearing snow and ice.

The averages compare with the previous year, as follows :—

Per mile run by engine.	
In 1900-1901	$ 76 06
1899-1900	65 08
Per mile run by trains.	
In 1900-1901	$ 96 88
1899-1900	83 40
Per mile of by railway.	
In 1900-1901	$ 1,246 50
1899-1900	1,052 05

TRACK.

At Colville 1,500 feet of new track were graded and finished, making a saving of 150 feet in distance and greatly improving the alignment. There were 2,800 cubic yards of earthwork, one cedar box culvert put in, and 1,500 feet of fence erected.

During the year 1,300 old iron rails were taken up and replaced with a better class of old rails, some of which were improved by cutting the worn ends off.

Steel rails, 56 lbs. to the yard, were laid between Tignish and Alberton (12 miles), and between 48th Road and Cardigan (6 miles), and between Mount Stewart and Souris (12 miles).

SIDINGS.

At Duvar, a siding of 204 feet was built.

O'Leary, a siding was lengthened 170 feet.

Summerside, a through siding of 750 feet, and a spur 113 feet were built.

TIES.

There were renewed during the year 45,000 ordinary ties, 21 sets switch ties, 10 head-blocks and frames, and 932 culled ties were used in yards and sidings.

BALLASTING.

During the year 13,091 cubic yards of ballast were distributed where most needed, and 1,770 cubic yards of earth were removed from cuttings and ditches and used for widening embankments.

FENCING.

Two and three-quarter miles of old fence were replaced by Page wire and posts, one and a half miles were replaced by woven wire with posts and battens, and about two miles with barbed wire; 9,445 feet of snow fence were rebuilt, and general repairs made on both snow and ordinary fences where required.

BUILDING, PLATFORMS, ETC.

At Tignish the cellar of the agent's dwelling was repaired.

At St. Louis a new station 20 x 40 was built.

At Conway a new flag station was built.

At Port Hill a new kitchen was built and painted inside.

At Richmond a new station platform was built.

At Wellington the waiting-room and office were painted.

At St. Nicholas a new flag station was built and the platform renewed.

At Summerside a new gravel roof was put on the station freight office, the office of the freight shed on the wharf was rebuilt, and the freight shed was raised and put on a new foundation.

The new office on wharf was painted, and the station freight office was painted inside and out.

At New Annan station the platform was rebuilt.

At Kingston a new door was supplied the freight house, and the agent's kitchen was painted inside and out.

At Blueshank the station was painted.

At Cape Traverse the station platform and engine house were rebuilt.

At Hunter river, a new door was put on the waiting-room, and 120 feet of breastwork built and used as a loading platform.

At Charlottetown, new sills were placed under part of the station and freight house, a new office was built for the engineers, and roof of baggage-room was repaired.

At Bedford the waiting-room and office were painted.

At Scotchfort station the platform was rebuilt.

At Mount Stewart the engine house was repaired, and the roof of station shingled.

At St. Peter's the roof of station was shingled, and also half of the roof of dwelling.

At Bear river, sills were put under the station.

At Souris the engine house was rebuilt, and freight house on wharf received a new felt roof, and had one side shingled.

At Peake's the waiting-room and office were repaired.

At Cardigan a dwelling was provided the agent, a new door was put on waiting-room, and 30 feet were added to the freight shed.

At Georgetown the engine house was shingled and repaired.

WHARFS AND BREASTWORKS.

At Alberton, in repairing the wharf, 38 tons of timber, 56 piles, 60 cross-ties, 385 drift bolts, 8 cars of slabs, 5 cars of hard stone, 4 cars of earth, and 12 screw bolts were used.

At Summerside, 63 tons of timber, 15 creosoted piles, 20 screw bolts, 10 clamp plates, 5 cars of poles, 15 cars hard stone, 700 drift bolts, 9,000 feet of deal, and 3 mooring posts were used in repairing the wharf.

At Georgetown, 20 tons of timber, 60 piles, 60 cars of earth, 27 cars of ballast, 24 cars and 211 cart loads of brush, 22 cars and 84 cart loads of hand stone were used in repairing the wharf.

At Souris in repairing the wharf, 30 tons of timber, 39 cars of brush, 88 cars of clay, 80 tons of hard stone, 4 creosoted piles, 26 fenders, and 585 drift bolts were used.

BRIDGES AND CULVERTS.

At Harpers a new iron bridge was put in, using 18 piles, 85 cubic feet of timber, 85 barrels of cement, 170 barrels of sand, 50 tons of broken stone, and 2 tons of old iron rails.

At Morell, a new steel through deck bridge was erected in place of an old Howe truss wooden bridge, condemned.

During the year there were 24 wooden culverts rebuilt, and 9 cast iron pipe culverts put in. Thirty-two cattle guards were also rebuilt.

The bridges at Tignish, Harpers, Trout Brook, Carroll's Pawes, Pawes' West, Ellerslie, Blueshank, Freetown, Emerald, Bradalbane, Elliott's, Moore's, Milton Creek, Curtis Creek, Marie, Midgell, St. Peters, Five Houses, and Selkirk were painted and received necessary repairs.

ROLLING STOCK.

The following is a summary of the principal work done in the shops of the mechanical department :—

LOCOMOTIVES.

Two new locomotives were purchased from the Canadian Locomotive Works, of Kingston, Ont., (Nos. 22 and 23), and charged to capital.

Eight engines received specific repairs, and 4 heavy repairs. The following work was performed and new parts supplied:—Four engines had their cylinder bored out and five boxes patched, and were given new pistons, cross-heads, slides, motions, driving and truck boxes, cab mountings, balance valves, crank pins, and all new brasses in wearing parts. Four tenders were largely rebuilt. Eight locomotive smoke stacks were built. 2,000 tubes were renewed in locomotive boilers. One air reservoir, 6 pop valves, 4 whistles, 50 sets of steam packing, and 20 new driving springs were made. Twelve injectors were largely rebuilt. Twelve sets of driving wheels, and 4 sets of engine truck wheels were turned ; 594 wheels were pressed on axles, and 200 new axles were turned ; 400 oil boxes were made, with spring covers ; 5,467 lbs. of nuts were tapped ; 11,000 bolts were forged and threaded ; 115,130 lbs. of iron were forged ; 120 driving and engine truck springs were repaired ; and 993 lbs. of steel were forged ; besides ordinary running repairs.

For the road department, 20 frogs, 10 sets of switch gear, one set of track scales, 6 sets of small scales, and 6 track ratchets were repaired ; 24 new frogs, 16 sets of switch gear, and 8 smoke stacks for engine sheds were made ; 576 lbs. of steel, and 19,025 lbs. of iron were forged ; 1,200 old tubes were slotted and pointed for fencing.

BRASS FOUNDRY.

Output :—12,434 lbs. of brass castings, and 114 battery zincs.

CAR SHOP.

Two first-class cars, 1 second-class car, 20 platform cars, and 20 box cars were built and charged to capital.

Four first-class cars, 2 postal cars, 4 second-class cars, 40 box cars, 25 platform cars, 2 snow ploughs, and 2 flanger cars received heavy repairs.

Three first-class cars, 2 second-class cars, 25 box cars, 20 platform cars, and 2 flanger cars received light repairs.

Rebuilt 1 platform car, and 4 fifteen-ton coal cars to replace the same number of ten-ton cars condemned.

One new cab was built, and 8 cabs were repaired (4 with new running boards, buffer beams, boxes, and seats). Six new tender trucks, 6 pilots, and 3 tender houses were made.

For the traffic and road departments there were 34 loading platforms, 14 switch frames, 6 freight trucks, and 3 baggage trucks made ; and 3 baggage trucks, 6 freight trucks repaired ; one derrick, and one hand-car rebuilt ; and 60 bags of plugs cut.

PAINT SHOP.

Seven first-class cars, 3 second-class cars, 1 postal and smoking car, and 6 locomotives were painted and varnished.

Forty-two box cars, and 26 platform cars were painted.

Six first-class cars, 5 second-class cars, 4 postal and baggage cars combined, and 3 baggage cars were cleaned and varnished.

200 panes of glass were put in buildings.

STORES.

The value of stores purchased was	$168,529	70
The value of stores used was	167,957	64
The value of old material sold was	3,485	77

The value of stores on hand at the end of the year was :—

Ordinary stores	$ 55,337	15
Fuel	7,326	54
Iron and steel rails and fastenings	4,459	22
Old material for sale	6,801	33
	$73,924	24

GENERAL.

The rolling stock, road bed, and buildings have been maintained in a state of efficiency.

I inclose a return of minor casualties which occurred during the year.

I have the honour to be, sir,
Your obedient servant,

G. A. SHARP,
Superintendent.

D. Pottinger, Esq.,
General Manager,
Government Railways,
Moncton, N.B.

No. 1.—PRINCE EDWARD ISLAND RAILWAY.

Dr. CAPITAL ACCOUNT. Cr.

		$ cts.			$ cts.
1900. June 30.	To cost of road and equipment to date....................	3,843,653 28	1900. June 30.	By Dominion of Canada......	3,843,653 28
1901. June 30.	To expenditure year ended June 30 as follows: Hillsborough Bridge.........$92,028 43 Murray Harbour Branch........ 115,663 88 Steel Rails..... 54,000 00 Rolling Stock... 10,000 00 Reducing Curves. 2,989 10 New Machinery. 3,493 01 Increased accommodation at Cardigan...... 1,999 51	280,173 93	1901. June 30.	" "	280,173 93
		4,123,827 21			4,123,827 21

W. T. HUGGAN,
Accountant and Auditor.

Charlottetown, P.E.I., June 30, 1901.

No. 2.—PRINCE EDWARD ISLAND RAILWAY.

Dr. REVENUE ACCOUNT for Year ended June 30, 1901. Cr.

Previous Year.	Expenditure.	Year ended June 30, 1901.	Previous Year.	Receipts.	Year ended June 30, 1901.
$ cts.		$ cts.	$ cts.		$ cts.
72,886 18	Locomotive power.......	73,813 90	72,998 42	Passenger traffic.........	78,689 73
39,553 09	Car expenses.............	42,836 26	83,627 41	Freight traffic	97,425 85
65,201 09	Maintenance of way and works......, ...	96,213 25	18,112 90	Mails and Sundries.......	17,767 90
32,085 44	Station expenses...........	36,281 47	174,738 73	....Total receipts.......	193,883 48
11,206 01	General charges............	13,621 36	46,193 08	....Balance	67,882 76
220,931 81	....Totals.....	261,766 24	220,931 81	....Totals............	261,766 24

W. T. HUGGAN,
Accountant and Auditor.

Charlottetown, P.E.I., June 30, 1901.

No. 3.—PRINCE EDWARD ISLAND RAILWAY.

DR. LOCOMOTIVE POWER.—(Abstract No. 1.) CR.

Previous Year.	Details.	Year ended June 30, 1901.
$ cts.		$ cts.
792 34	Mechanical Superintendent's Salary, clerks, office and travelling expenses..	1,075 29
18,410 18	Wages of drivers, firemen and cleaners	21,100 38
14,614 19	Fuel	27,913 56
2,080 77	Oil, tallow, waste and small stores	2,398 83
34,843 29	Repairs to engines, tenders, and engine tools	18,992 09
395 46	Water including pump and tank repairs	468 95
1,749 95	Miscellaneous	1,864 80
72,886 18	Totals	73,813 90

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 20, 1901.

No. 4.—PRINCE EDWARD ISLAND RAILWAY.

CAR EXPENSES.—(Abstract No. 2.)

Previous Years	Details.	Year ended June 30, 1901.
$ cts.		$ cts.
11,038 89	Repairs to Passenger Cars	7,782 14
2,431 37	" Postal, express, and baggage cars	3,336 27
3,806 29	" Freight cars and vans	5,270 46
650 25	" Snow ploughs and flangers	455 97
16,997 48	Wages of conductors, train baggage masters and brakesman	21,250 49
740 93	Oil and waste for packing	688 09
2,933 79	Small stores and fuel	2,799 71
954 09	Miscellaneous	1,253 13
39,553 09	Totals	42,836 26

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I. June 30, 1901.

No. 5.—PRINCE EDWARD ISLAND RAILWAY.

MAINTENANCE OF WAY AND WORKS (Abstract No. 3).

Previous Year.	Details.	Year ended June 30, 1901.
$ cts.		$ cts.
294 01	Engineer's salary, clerks, office and travelling expenses	360 40
45,560 60	Wages in repairing roadway, fences and semaphores	48,626 05
17,255 13	Rails, chairs and spikes	9,937 26
13,755 64	Ties	13,666 46
11,234 78	Timber and lumber for repairs to bridges, cattle guards, &c.	2,706 98
4,959 64	Repairs to wharves	7,354 74
4,464 27	" buildings and platforms	5,454 66
1,188 40	" tools	1,490 83
998 88	" ice and snow	6,615 87
65,201 09		96,213 25

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 30, 1901.

No. 6—PRINCE EDWARD ISLAND RAILWAY.

STATION EXPENSES—(Abstract No. 4).

Previous Year.	Details.	Year ended June 30, 1901.
$ cts.		$ cts.
25,801 27	Salaries and wages of station masters, agents, clerks, telegraph operators, station baggage masters, yardmasters, switchmen and labourers	28,261 62
6,284 17	Fuel, oil, light, stationery, and other incidental expenses	8,019 85
32,085 44		36,281 47

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 30, 1901.

No. 7.—PRINCE EDWARD ISLAND RAILWAY.

GENERAL CHARGES.—(Abstract No. 5.)

Previous Year.	Details.	Year ended June 30, 1901.
$ cts.		$ cts.
4,705 94	Superintendents and train despatchers salaries, clerks, office and travelling expenses	5,698 22
5,049 52	Accountant and Auditor, paymasters and cashiers salaries, clerks, office and travelling expenses	4,788 01
237 34	Advertising	851 01
720 50	Damages to men, animals and goods	578 05
151 07	Telegraph expenses, (not including pay to operators)	446 95
341 64	Miscellaneous	259 12
11,206 01	Totals	12,621 36

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 30, 1901.

No. 8.—PRINCE EDWARD ISLAND RAILWAY.

STATEMENT OF GENERAL STORES ACCOUNT, Year ended June 30, 1901.

1900.	DR.	$ cts.	$ cts.
June 30...	To balance brought forward		63,505 31
1901.			
June 30...	Purchases during year including rails	168,529 70	
	Charges from other departments	12,272 74	
	Pay rolls	1,059 90	
			181,862 34
			245,367 65
	CR.		
June 30...	By issues during the year		171,443 41
	Balance: Ordinary stores $56,408 51		73,924 24
	Balance: Fuel 7,326 54		
	Balance: Rails and fastenings on hand 9,736 69		
	Balance: Old material serviceable 452 50		

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 30, 1901.

No. 9.—PRINCE EDWARD ISLAND RAILWAY.

Dr.	General Balance.			Cr.	
	$	cts.		$	cts.
General stores	73,924	24	Dominion Account	92,284	23
Cash	11,645	73	Through Ticket Ledger	783	11
Stations	1,552	51	John McDougall & Co	648	75
Post Office Department	2,582	50	Rhodes, Curry & Co	54	76
Militia Department	245	88			
Anglo American Telegraph Co	46	43			
Judge Weatherbee	30	00			
Sidney Grey	30	00			
Railway extension, Charlottetown	812	83			
B. & M. Rattenbury	76	20			
Intercolonial Railway	1,521	89			
Accident Insurance	1,302	64			
	93,770	85		93,770	85

W. T. HUGGAN,
Accountant and Auditor.

Charlottetown, P.E.I., June 30, 1901.

No. 10.—PRINCE EDWARD ISLAND RAILWAY.

COMPARATIVE STATEMENT of Averages for Years ended June 30, 1900 and 1901.

Details.		1901.	1900.
Mileage of railway open		210	210
Engine mileage		344,144	339,458
Train mileage		270,255	264,895
Car mileage		1,646,521	1,538,032
Receipts, per engine mile	Cents.	56·34	51·47
" mile of railway	Dollars.	923·25	832·09
Percentage of passenger earnings to gross receipts		40·59	41·77
" freight " "		50·25	47·86
" other " "		9·16	10·37
Expenses per engine mile:—			
Drivers, firemen and cleaners wages		6·13	5·43
Fuel		8·11	4·31
Oil, tallow, waste and small stores		·70	·61
Repairs to engines		5·52	10·26
Water and tank repairs		·13	·12
Miscellaneous		·54	·52
		21·13	21·25
Mechanical superintendents salary, office and travelling expenses		·31	·23
Total	Cents.	21·44	21·48
Locomotive power, per engine mile		21·44	21·48
Car expenses "		12·45	11·65
Maintenance of way and works, per engine mile		27·96	19·20
Station expenses		10·54	9·45
General charges		3·67	3·30
Total per engine mile	Cents.	76·06	65·08
Locomotive power, per train mile		27·32	27 51
Car expenses		15·85	14·93
Maintenance of way and works		35·60	24·61
Station expenses		13·43	12·12
General charges		4·68	4·23
Total per train mile	Cents.	96·88	83·40
Working expenses per train mile of railway	Dollars.	1,246·50	1,052·05

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 30, 1901.

A.—PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL DEPARTMENT.

STATEMENT of Cost of Locomotive Power for the Year ended June 30, 1901.

Months.	Miles run by Engines less Ballasting.	Cost of							Average per Mile Run.						
		Enginemen's Wages.	Fuel.	Oil, Waste, &c.	Repairs.	Water, including Tank and Pump Repairs.	Miscellaneous, including Expenses of Office and Engine House.	Total.	Enginemen.	Fuel.	Oil, Waste, &c.	Repairs.	Water.	Miscellaneous.	Total.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.
1900—July	33,047	1,683 26	2,214 54	214 17	1,402 38	41 58	209 10	5,765 03	5·09	6·70	0·64	4·25	0·13	0·63	17·44
August	33,120	1,871 16	2,331 00	254 68	1,227 99	2 66	231 16	5,918 65	5·65	7·04	0·76	3·71	0 01	0·70	17·87
September	31,086	1,711 09	2,550 24	211 82	1,297 46	24 86	231 12	6,026 59	5·50	8·21	0·68	4·17	0·08	0·74	19 38
October	31,117	1,764 90	2,500 83	254 74	1,899 64	3 20	235 74	6,659 05	5·67	8·04	0·82	6·11	0·01	0·75	21·40
November	31,837	1,817 88	2,624 59	269 12	2,141 82	48 65	309 91	7,211 97	5·71	8·24	0·85	6·73	0·15	0·97	22·65
December	30,256	1,630 16	2,402 76	226 21	2,032 04	155 44	264 93	6,711 54	5·39	7·94	0·75	6·72	0·51	0·87	22·18
1901—January	23,557	1,946 21	2,321 92	203 09	1,956 03	7 00	329 34	6,763 59	8·27	9·86	0·86	8·30	0·03	1·39	28·71
February	24,010	1,704 08	2,568 29	226 92	1,349 06	4 00	207 34	6,059 69	7·10	10·69	0·94	5·62	0·02	0·86	25·23
March	25,773	2,214 11	2,916 71	230 12	1,989 82	3 40	278 72	7,632 88	8·59	11·32	0·89	7·72	0·01	1·08	29·61
April	21,854	1,549 73	1,927 72	146 04	1,716 74	26 36	227 86	5,594 45	7·09	8·82	0·67	7·86	0·12	1·04	25·60
May	29,064	1,757 70	1,356 18	126 91	1,230 11	1 80	203 49	4,676 19	6·04	4·66	0·43	4·25	0·01	0·70	16·09
June	29,423	1,450 10	2,198 78	35 01	749 00	150 00	211 38	4,794 27	4·93	7·47	0·12	2·54	0·51	0·72	16·29
Totals	344,144	21,100 38	27,913 56	2,398 83	18,992 09	468 95	2,940 09	73,813 90	6·13	8·11	0·69	5·52	0·14	0·86	21·45

S. F. HODGSON,
Mechanical Accountant.

PRINCE EDWARD

MECHANICAL

STATEMENT of the Performance and Consumption

Months.	Hours in steam.	Train Mileage.				Mileage by Engines.			
		Passenger.	Freight and Mixed.	Ballasting.	Piloting.	With Train.	Light.	Shunting.	Total.
1900—July	4,111	11,664	14,551	1,563	84	27,862	227	7,096	35,185
August	4,341	12,109	14,355	5,744	218	32,426	24	6,962	39,412
September	3,955	11,025	14,241	4,886	....	30,152	5	6,197	36,354
October	4,233	8,884	15,920	5,710	....	30,514	158	6,720	37,392
November	4,135	10,261	15,240	3,491	22	29,014	123	6,662	35,799
December	3,532	8,882	14,825	8	44	23,759	49	6,456	30,264
1901—January	3,286	3,897	13,877	....	22	17,796	100	5,661	23,557
February	3,478	3,730	12,164	....	3,118	19,012	114	4,884	24,010
March	4,227	4,515	12,469	....	2,004	18,988	150	6,635	25,773
April	3,033	1,931	14,261	40	44	16,266	108	5,520	21,894
May	3,599	6,488	15,882	308	....	22,678	......	6,749	29,427
June	3,624	9,555	13,983	3,156	....	26,694	92	6,273	33,059
Totals	45,554	92,941	171,758	24,906	5,556	295,161	1,150	75,815	372,126

ISLAND RAILWAY.

DEPARTMENT.

of Locomotives for the Year ended June 30, 1900.

Total Mileage.		Average of Cars per Mile run with Train.	Average Mileage.		Consumption				Consumption per 100 miles run by Engines.			
Cars.	Snow Ploughs.		Miles to one hour in steam.	Of Cars to one of engines.	Bushels of Coal.	Pints of Oil.	Pints of Valve Oil.	Pounds of Waste.	Bushels of Coal.	Pints of Oil.	Pints of Valve Oil.	Pounds of Waste.
165,768	....	5·97	8·56	4·71	18,248	2,080	968	701	51·96	5·91	2·75	1·99
193,694	....	6·01	9·01	4·91	19,200	2,615	1,112	682	48·72	6·63	2·82	1·73
196,678	....	6·52	9·19	5·41	21,048	2,258	988	670	57·89	6·21	2·71	1·84
188,716	....	6·18	8·83	6·82	20,935	2,803	1,180	771	55·98	7·49	3·15	2·06
177,991	....	6·14	8·66	4·97	19,896	2,613	1,088	655	55·57	7·30	3·04	1·83
153,077	1,191	6·45	8·57	5·06	19,024	2,428	856	586	62·19	8·02	2·82	1·93
119,979	1,568	6·75	7·17	5·09	16,708	1,962	688	483	70·92	8·32	2·92	2·05
87,891	5,461	5·53	6·90	3·66	16,836	2,405	952	529	70·12	10·01	3·96	2·20
118,222	4,355	6·96	6·09	4·59	17,694	2,239	832	525	68·65	8·69	3·22	2·07
108,063	....	6·66	7.22	4·93	12,121	1,402	424	436	55·36	6·40	1·94	1·99
155,287	....	6·84	8·18	5·27	16,353	1,096	332	533	55·57	3·72	1·12	1·81
175,102	....	6·56	9·12	7·59	16,955	1,218	340	477	51·28	3·68	1·03	1·44
1,840,468	12,575	6·35	8·17	4·95	215,018	25,119	9,760	7,048	57·78	6·75	2·62	1·89

S. F. HODGSON
Mechanical Accountant.

C.—PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL DEPARTMENT.

MONTHLY STATEMENT of Car Mileage for Year ended June 30, 1901.

Months.	First Class.	Second Class & Baggage.	Postal and smoking	Box and Stock.	Platform.	Total.
1900—July	37,516	21,866	31,521	54,661	20,204	165,768
August	35,361	27,078	31,094	48,090	52,071	193,694
September	37,845	26,078	29,964	47,437	55,354	196,678
October	26,275	25,041	29,245	53,760	54,395	188,716
November	26,996	24,742	29,668	63,926	32,659	177,991
December	24,568	21,104	26,126	62,799	18,480	153,077
1901—January	17,487	15,701	17,301	57,121	12,369	119,979
February	15,281	11,891	14,887	32,254	13,578	87,891
March	16,663	15,087	15,907	49,387	21,178	118,222
April	19,411	16,146	16,517	43,358	12,631	108,063
May	22,950	20,848	27,316	71,774	12,399	155,287
June	26,080	23,258	29,452	58,176	38,136	175,102
Totals	306,433	248,840	298,998	642,743	343,454	1,840,468
Less ballasting	....	12,963	13,573	....	168,411	194,947
Balance	306,433	235,877	285,425	642,743	175,043	1,645,521

S. F. HODGSON,
Mechanical Accountant.

D.—PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL DEPARTMENT.

STATEMENT showing the number of Locomotives and of the various classes of Cars and other Rolling Stock on June 30 1901.

—	Locomotives.	Classification of Cars.														Snow Ploughs.	Flangers.	Totals.
		1st Class.	2nd Class.	Combined 2nd and Baggage.	Postal and Smoking.	Combined Postal and Baggage.	Baggage.	Pay Car.	Vans.	Box Freight.	Refrigerator Car.	Stock.	Coal.	Platform.	Total.			
On hand, serviceable, June 30, 1900..	21	17	7	4	2	3	4	1	3	183	1	17	18	125	385	8	7	15
Condemned, July 1, 1901	...	..	..	....	...	....	..	..	..	....	....	..	..	2	2	..	..	..
Total..	21	17	7	4	2	3	4	1	3	183	1	17	18	127	387	8	7	15
Purchased during the year on capital account	2	..	..	....	...	....	..	..	..	....	....	..	..	....	....	..	..	....
Built during year on capital account..	....	2	1	....	...	....	..	..	..	20	....	..	..	20	43	..	..	....
Total	23	19	8	4	2	3	4	1	3	203	1	17	18	147	430	8	7	15
Condemned, July 1, 1900	...	..	..	....	....	....	..	..	..	....	....	..	..	2	2	..	..	....
" during the year	...	..	..	....	....	....	..	..	..	....	....	..	4	2	6	..	..	....
Total condemned	...	..	..	....	....	....	..	..	:	....	....	..	4	4	8	..	..	....
Less rebuilt,	...	..	..	....	....	....	..	..	..	....	....	..	4	1	5	..	..	....
To be rebuilt	...	..	..	....	....	....	..	..	..	....	....	..	..	3	3	..	..	....
Add serviceable and repairing..	23	19	8	4	2	3	4	1	3	203	1	17	18	144	427	8	7	15
Total	23	19	8	4	2	3	4	1	3	203	1	17	18	147	430	8	7	15

E.—PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL DEPARTMENT.

COMPARATIVE STATEMENT of the Expenses of the Mechanical Department for the Years ended June 30, 1900 and 1901.

—	1900.	1901.
The miles run by trains were	264,895	270,255
" engines were	339,458	344,144
" cars were	1,538,038	1,645,521
" snow ploughs were	1,499	12,575
	$ cts.	$ cts.
The cost of locomotive power was	72,886 18	73,813 90
" repairs to cars were	17,276 55	16,388 87
" " passenger cars was	11,038 89	7,782 14
" " postal and smoking cars was	2,431 37	3,336 27
" " freight cars and vans was	3,806 29	5,270 46
" labour, oils, and waste for cars was	740 93	698 09
" repairs to snow ploughs and flangers was	650 25	455 97
The cost of locomotive power per 100 miles run by trains was	27 51	27 31
" " " engines was	21 47	21 45
" " " cars was	4 73	4 45
The cost of repairs to cars per 100 miles run by trains was	6 52	6 06
" " " engines was	5 09	4 76
" " " cars was	1 12	0 99
The cost of labour, oil and waste for packing per 100 miles run by trains was	0 28	0 25
" " " engines was	0 21	0 19
" " " cars was	0 04	0 04
The repairs to passenger cars per 100 miles run by trains were	4 16	2 88
" postal and smoking cars were	0 91	1 23
" freight cars and vans	1 43	1 95

S. F. HODGSON,
Mechanical Accountant.

F.—PRINCE EDWARD ISLAND RAILWAY.

RETURN of Accidents and Casualties which have occurred on the line of the Prince Edward Island Railway during the Year ended June 30, 1901.

Date.	Time of Day or Night.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.	Name of Persons Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
1900.												
July 22.							Souris Yard	A. McEwen	Employee.	Hand caught while coupling cars.	Hand crushed.	
Aug. 25.	5.40 p.m.	5	Mixed	F. Kelley	D. Pound.	6	Blue Shank	D Pound.	„	Severe bodily injury by engine being derailed.	Fatally injured.	
Sept. 24.							St. Louis	F. Bernard	„	Leg fractured by falling rail.	Leg fracture	
Oct. 4.							Bear River	A. McIsaac	„	Shoulder dislocated by fall.	Shoulder dislocated.	
„ 29.							Ch. Town Yard.	Jas. Stewart	„	Hand crushed while coupling.	Hand crushed.	
Nov. 16.	5 20 p.m.	21	Mixed	G. Tanton	J. Millman	6	Royalty Junction.	F. A. McDonald.	„	Hand crushed while coupling cars.	„	
Dec. 1.							Summerside Wharf	Neil McKenzie	„	Hand crushed while driving piles.	„	
1901.												
Feb. 13.	6.30 a.m.	8	Mixed	G. W. Hibbett	R. Dongan	22	Georgetown Yard.	D. Gunn	„	Fingers crushed while coupling.	Fingers crushed.	
„ 14.	8.40 a.m.	8	„	G. W. Hibbett	C. McElman	3	Mount Stewart	C. Clarke	„	Hand crushed while coupling cars.	Hand crushed.	
Apl. 28.							York	R. Webster	„	Leg injured by handle of hand car.	Leg fractured.	
May 2.	10.00 a.m.	10	Mixed	T. Stanley	H. Sutherland	4	Mount Stewart	T. Stanley	„	Body injured while coupling cars.	Body injured.	
June 4.							Charlottetown	John Good	„	Fingers cut off while operating planer.	Fingers cut off	

No. 2

MEMO. OF DOCUMENTS AND PLANS FOR THE CHIEF ENGINEER OF RAILWAYS AND CANALS.

(FILED BY J. S. O'DWYER.)

JUNE 13, 1901.

Report.—Port Simpson to Teslin railway.

" Edmonton to Teslin railway.

Map showing explorations of 1900.

Profile of explorations of 1900.

Sketch map of the north-western portion of British Columbia.

Map of the north-western portion of Canada (to illustrate report on the Edmonton to Teslin railway).

Profile of the Edmonton to Teslin railway.

Admiralty charts (3)—

(1.) Port Simpson Harbour.

(2.) Kitimat Arm and vicinity.

(3.) Portland canal, Alice Arm and mouth of Nass river.

(Album of photographs.)

PROPOSED RAILWAY FROM PORT SIMPSON TO LAKE TESLIN, BRITISH COLUMBIA.

Report on Explorations made during the Season of 1900, by J. S. O'Dwyer, C.E., Engineer in Charge.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, CANADA, June 8, 1901.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Chief Engineer,
Department of Railways and Canals.

SIR,—I have the honour to transmit you herewith my report on the explorations performed under my charge during the season of 1901, in connection with the proposed railway from Port Simpson to Teslin lake.

I have the honour to be, sir, your obedient servant,

JOHN S. O'DWYER,
Engineer in Charge.

Memo.

Accompanying this report are the following :—

(1.) Map of explorations and projected location (scale of 2 miles to the inch).

(2.) Sketch map of the north-western portion of British Columbia (scale of 20 miles to the inch).

(3.) Profile of projected location.

(4.) Album of photographs.

The instructions received from the Chief Engineer outlined the following work in the field :—

(1.) Exploration of the main Clappan River Valley, from its head to the junction of the Clappan and Stikine rivers.

(2.) Exploration of the Stikine River Valley, from the mouth of the Clappan to the mouth of the Tahltan river.

(3.) Exploration of the country between the latter point and Teslin lake via the Tahltan River Valley and the most feasible route thence northward.

ITINERARY OF TRIP.

I left Ottawa for Vancouver, accompanied by my assistant and one man, on the 16th of May, having received my final instructions from the Chief Engineer the previous day.

Kamloops was reached on the 21st. Here I was detained until the 2nd of June, purchasing horses for my pack-train, getting pack saddled and rigging made, and hiring the necessary men to complete the party.

Owing to an accident to the Candian Pacific Railway Navigation Company's steamer *Danube*, we did not sail from Vancouver until the 8th of June, arriving at Wrangel, Alaska, on the 11th.

Here another delay occurred, due to the Hudson's Bay Company's steamer not carrying out instructions from the Victoria office, to await my arrival—on or about the 11th—before leaving for Telegraph creek. As a result, we were obliged to wait this steamer's return and only got away from Wrangel on the 19th.

The trip up the Stikine river was very slow and tedious, owing to high water. Telegraph creek was not reached until the evening of the 25th of June.

The tract of country under consideration for this year's explorations extends from the Clappan pass, at the head of Clappan river, to the south end of Teslin lake, and is accessible by steamer only at Glenora and Telegraph creek, on the Stikine River.

In order to expedite the survey, I had decided to proceed to Telegraph creek—as a fairly central point—make the explorations thence to Teslin lake first, then returning to Telegraph creek and refitting with supplies continue the survey to the head of the Clappan, and connect at the Clappan pass with my surveys of the previous year (made to this latter point from Hazelton on the Skeena river). By this disposition of the work in hand, I would reach the larger rivers (Tanzilla, Stikine and Clappan) at the localities where I anticipated crossing them, after the period of high water.

Following out this programme, I left Telegraph creek, for Teslin lake on the 28th of June, and reached the now defunct village of Teslin, at the south end of the lake, on the 8th of July. The route followed was by the government pack trail to the mouth of the Tahltan river, and thence to Teslin by the old pack trail. Side explorations, away from the main trail, were made from time to time at such points as seemed to demand extra examination.

At Teslin a day was spent in examining the shores of the lake for some miles below it head, and on the 10th we started on the return trip to Telegraph creek, arriving there on the 22nd.

Here I dispensed with the services of five of my men—for good and sufficient reasons—and hired Indians to replace them, thereby securing men who were more or less familiar with that portion of the country to be examined—lying between the mouth of the Clappan river and its head—and men, too, that could be discharged as soon as my actual surveys and explorations were completed, that is, when I should arrive at the Clappan pass.

From this point, I contemplated reaching the sea-coast via Hazelton on the Skeena—some 230 miles distant—and during this latter part of the trip there would be no need of more than sufficient men to handle the horses and outfit.

I left Telegraph creek with the newly organized party on the 29th of July, and following the right or north bank of the Stikine river to the mouth of the Clappan, a distance of 77 miles, crossed the Tahltan river at the twelfth mile, the Tuya river near the eighteenth, and the Tanzilla river, with the transverse survey, about 30½ miles from Telegraph creek.

At a point some 16 miles from Telegraph creek, the government pack trail leaves the vicinity of Stikine river on account of the numerous canyons in the river valley, and ascends on to the elevated rolling plateau following the north rim of the valley—nine miles further, or at the twenty-fifth mile (Portage camp)—we left the government trail leading to Dease lake, and thence to the Clappan river, some 60 miles by our trail, we were forced to cut a pack trail through rough timbered country, across numerous creeks in deep canyon-like ravines, over long stretches of muskeg, through tracts covered by densely fallen timber and over many other obstacles.

This pack trail lies from three to five miles distant from the Stikine river, as it was quite impracticable, across this stretch of country, to place it near the river or in the river valley itself, owing to the mightly canyon of the river proper and the many lateral ones, carrying tributary creeks to the river. The traverse survey, however, was carried along the river, on the tops of the main canyons and across the lateral ones, as men could travel on foot where it was impossible to take horses.

The pack trail again reached the banks of the Stikine at the sixtieth mile of the traverse survey, virtually the head of the 'Great Canyon of the Stikine,' extending to this distance from Telegraph creek, which is situated just at its lower end, thence to the mouth of the Clappan river, at the seventy-seventh mile, the pack trail was placed fairly close to the river.

On the 26th of August we camped on the north bank of the Stikine, opposite the mouth of the Clappan river, having been 29 days making the distance of 77 miles from Telegraph creek. During this time work was carried on every day but three (of which two were lost on account of rain), thus an idea can be formed of the obstacles to transportation by pack-trains that were encountered.

On the 28th of August the pack-train and outfit were crossed to the south bank of the Stikine—a half-mile above the Clappan—and here the horses enjoyed a week's rest in the midst of abundant feed, of which they were sorely in need, as feed had been scarce at numerous points on our trail.

This interval—from the 29th of August to the 5th of September—was employed in continuing the traverse survey up the Stikine river 16½ miles to Jones' creek, and also some 10 miles up the valley of Ptarmigan creek, which empties into the Stikine a mile and a half above the Clappan. At these two points connections were made with my explorations of 1898 from Dease lake south-eastward to the main Stikine valley. These short exploratory trips filled up the gap in the complete traverse of the Stikine river from Telegraph creek to its head at the Skeena-Stikine summit—a few miles east of the Clappan pass—and furthermore, completed the examination of the entire length of Ptarmigan creek. This creek seems to offer so far the only practicable route for an exit northward from the Clappan valley, although later on I will suggest another route which appears worthy of examination at a future time should the Clappan route be adopted. During this detention at the Clappan mouth the men not utilized on the side exploration trips, were employed cutting out our trail ahead, up the Clappan valley some 18 miles, to the point where the main Hazelton trail crosses the river, and thence from the crossing strikes westerly across country to Telegraph creek. This main trail I expected to utilize to the Clappan pass, and having no further use for some of the axemen, I discharged four of my Indians here, anticipating that I would not require these men on the main trail, as it had recently been traversed by a large pack-train employed by the telegraph construction party of the Department of Public Works, and consequently doubtless made passable. On the 5th of September the party left the mouth of the Clappan river, bound southward for its head waters.

The traverse survey was carried along the right on east bank of the river, where the trail had previously been cut out.

About 13 miles from the mouth is the crossing of the main trail between Hazelton and Telegraph creek—an easy fording place at low water, but decidedly difficult and rather dangerous at high water. Here we struck into this main pack-trail, and used it for the pack-train from this point to the Clappan pass, and thence on to Hazelton. Our rate of daily progress was now materially increased, and averaged 10 miles per day, for each day of travelling to the Clappan pass.

At 30 miles north of the mouth of Clappan we reached the main forks of the river—one branch tending to the south-west and the other to the south-east. This latter leads to the Clappan pass, and is the one along which the explorations were carried.

At the 112th mile the pack-trail leaves the main stream, and, striking easterly, follows the narrow grassy valley of atributary stream for some 12 miles, then crosses an intermediate summit at an elevation of 5,230 feet above the sea, and again reaches the valley of the main stream at 22 miles from where we left it—or the 134th mile of the trail. The traverse survey was subsequently carried along the main valley and showed the distance by this latter route to be about 2 miles shorter.

Before crossing the intermediate summit explorations were made 15 miles easterly to the head of the creek, by which we had travelled from the main Clappan, to ascertain if a pass coulb be obtained from its head into the valley of the main Stikine river. This creek was found to head in a cul-de-sac among snow banks and glaciers.

Having resumed our course along the main Clappan river, the traverse survey was continued in this valley to the Clappan pass, and thence over this summit, which was crossed on the 14th, through eighteen inches of snow. On the following day the survey was connected with that of last season, at Upper forks of main Stikine river, a point ascertained by last year's traverse to be 226 miles from Hazelton, via the projected location and 10 miles north-west of the Skeena-Stikine summit.

In my report of the explorations of last season (p. 164, part 1, Report Railways and Canals for 1899-1900), I outlined a feasible connection from Skeena-Stikine summit (at the 216th mile from Hazelton) to the Clappan valley by way of the Clappan pass. The summit of this pass being some 10 miles west of the above watershed, and 1,076 feet higher, this connection would demand a considerable amount of heavy rock work and rather severe grades in places.

Having ascertained from one of my Indians that another pass through these mountains lay some miles north, and was used by them in crossing from the Clappan to the Stikine valleys. I devoted a couple of days to the examination of this northern pass, and was gratified to find it gave a summit some 800 feet lower than the Clappan pass, and afforded a connection to the Clappan valley from the Skeena-Stikine watershed of practically no greater length. Its summit is but 255 feet higher than this watershed, but the railway location would have to descend from the watershed into the valley of a small tributary to the Stikine, and then ascend by another stream to the summit of the pass.

This pass opens out easterly towards the shack where, in August of 1899, the remains of a white man were found by my party, and has been consequently called 'Dead Man's Pass.'

It lies about fourteen miles north-west of the Skeena Stikine Summit, and can be approached on both sides by grades of 75 to 100 feet per mile, with light work ; by using heavier work these grades could be reduced to between 50 and 75 feet per mile.

Before leaving this vicinity explorations were made from the Forks to the head of the east branch of the Stikine, about 17 miles, with the intention of connecting them later on with the traverse of 1899, by ascending the north fork of the Stikine from the 190th mile of the projected location of that year—which latter point we would pass on our outward trip to Hazelton.

When we ultimately reached this 190th mile I spent two days in exploring the aforesaid north fork of the Skeena. This stream and the east fork of the Stikine (noted above), lie in the easterly of the two parallel valleys referred to in the report of the Chief Engineer of railways and canals for 1898-1899 (part 1, p. 33).

The examination of this valley, made during the present season, shows that while the summit is 115 feet lower than that of the westerly valley, in which latter lies the watershed—termed by me the Skeena—Stikine Summit, this easterly valley is not by any means as suitable for railway construction as the westerly one. It is very narrow, rocky and of a canyon nature on its more southern portion near the Skeena river, while its north-western part—although an open and easy valley—does not offer as feasible a connection with Dead Man's Pass as that given by the westerly valley, moreover the distance is not lessened. Were the railway line to be carried down the upper Stikine river, rather than via the Clappan, this easterly valley would then be worthy of consideration, but as the line via the Clappan valley, being much more direct, is without doubt the better route, and as access to this Clappan valley is preferably made by way of Dead Man's Pass, there can now be no question that the projected line from Hazelton should reach the watershed between the Skeena and Stikine rivers by the westerly of these two valleys, that is by the main upper Skeena valley—which is from 1 to 2 miles wide, and demands but a limited amount of heavy work, with an average grade of 54 feet per mile.

With these last explorations—which were completed on September 24—the field survey work for this season terminated. The next day we again resumed the trail for Hazelton and reached there on October 10.

At the Indian village of Kispyox and at Hazelton I disposed of those of my horses that had survived the trip ; some of them towards the latter part of the trip had become too weak to travel from lack of feed and had to be shot.

From Hazelton we travelled to Port Essington—on the sea coast—by canoe, and from there to Vancouver by steamer, arriving on October 25. Here the remaining men were paid off, and leaving Vancouver on the 27th I reached Ottawa on November 1.

The explorations of this season covered some 470 miles of actual survey and reconnaissance, extending from the Skeena-Stikine summit, 216 miles from Hazelton, to the south end of Teslin lake, at the 558th mile from Hazelton, via the projected location.

A track survey was carried on through the entire work and barometer readings taken frequently each day for ascertaining relative elevations above the sea. Latitude observations with a large sextant and mercurical horizon were obtained as often as practicable, as a check on the traverse survey. The variation of the magnetic needle was accurately determined by stellar observations taken with a transit at Telegraph creek.

DETAILED DESCRIPTION *of the projected location from the Skeena Stikine Summit to Teslin Lake viz.: From the 216th to the 558th mile (mileage reckoned from Hazelton) with an Approximate Estimate of the cost of Construction.*

This section forms the northern portion of the proposed railway from Port Simpson to Teslin ocean port line.)

The explorations of 1899, under my charge, extended from Hazelton to a point on the Upper Stikine, 230 miles distant by the projected location, and are fully described in my report thereon (*vide* Report of the Department of Railways and Canals for 1899-1900, page 158, *et seq.*).

This season's explorations embrace the country comprised in the extension of the work of 1899, from the Skeena-Stikine summit, at the 216th mile (from Hazelton) to the south end of Teslin lake, a further distance of 342 miles, by the projected location, or a total distance of 558 miles from Hazelton.

For descriptive purposes, that portion of the projected location covered by this season's explorations, and extending from the 216th to the 558th mile from Hazelton, as above noted, is divided into the following eight sections :—

	Miles.
1. Summit Section— 216th to 230th mile	14
2. Clappan River Section— 230th to 298th mile	68
3. Ptarmigan Creek and Gnat Creek Section— 298th to 340th mile	42
4. Tanzilla River Section— 340th to 390th mile	50
5. Stikine River Section— 390th to 406th mile	16
6. Tahltan River Section— 406th to 434th mile	28
7. Hacket River and Egnell's Creek Section— 434th to 455th mile	21
8. Grand Valley Section— 455th to 558th mile	103

Before proceeding with the detailed description of these sections, I will give here a memorandum of the data used in estimating the approximate cost of construction per mile.

MEMORANDUM REGARDING THE APPROXIMATE ESTIMATE OF COST OF CONSTRUCTION.

This estimate provides for the railway line complete, with usual station buildings, sidings, telegraph line, water supply, &c.

(It is based on the cost of similar work in eastern Canada, to which must, therefore, be added the cost of transport of labourers, plant and material, also whatever difference there may be in wages.)

To arrive at this estimate the following data are used :—

1. Cost of one mile of permanent way, in position on formation, including ballasting.

2. Cost of constructing one mile of roadbed, under three grades : (a) light work ; (b) medium work ; (c) heavy work.

The details of these data are as follows :—

COST OF 1 MILE OF PERMANENT WAY.

(IN POSITION ON FORMATION, INCLUDING BALLASTING.)

Items.	Rates.	Amounts.
	$ cts.	$ cts.
Steel rails (56 lbs. per lin. yd.) 88 tons	$32.60 per ton.	2,868 80
Angle plates (24-in.) (allowing 360 joints per mile) 360 pairs at 36 lbs. per pair, 12,960 lbs	2c. per lb.	259 20
Bolts and nuts (¾-in.) 4 bolts per joint, 1,440 bolts and nuts, (weight 1 lb.) 1,440 lbs	3c. "	43 20
Track spikes (5½-in. x $\frac{9}{16}$) 4 per tie, 6,000 lbs	2c. "	120 00
Valcantite washers	....	25 00
Ties (spaced 2 feet centres) 2,640	25c.	660 00
Track-laying per mile	....	250 00
Ballasting, 2,200 cubic yds. per mile	40c.	880 00
Total	....	5,106 20

COST OF CONSTRUCTING 1 MILE OF ROAD BED.

GRADE (a) LIGHT WORK.

Items.	Rates.	Amounts.
	$ cts.	$ cts.
Clearing, 12 acres	25 00	300 00
Close cutting, 2 acres	35 00	70 00
Grubbing, 2 acres	50 00	100 00
Earthwork, 15,000 cubic yds	0 25	3,750 00
Rock work, 1,000 "	1 00	1,000 00
Minor structures		1,000 00
Engineering, $600, stations, $150, telegraph line, $125, water supply, $150, sidings, $350		1,375 00
		7,595 00
Contingencies, 10 per cent		759 50
Cost to formation		8,354 50
Permanent way		5,106 20
Total		13,460 70

(Approximately, $13,500 per mile.)

COST OF CONSTRUCTING 1 MILE OF ROAD BED.

GRADE (b) MEDIUM WORK.

Items.	Rates.	Amounts.
	$ cts.	$ cts.
Clearing, 12 acres	25 00	300 00
Close cutting, 2 acres	35 00	70 00
Grubbing, 2 acres	50 00	100 00
Earthwork, 15,000 cubic yds	0 25	3,750 00
Rock work, 10,000 "	1 00	10,000 00
Minor structures		1,250 00
Engineering, $700, stations, $150, telegraph line, $125, water supply, $150, sidings, $400		1,525 00
		16,995 00
Contingencies, 10 per cent		1,699 50
Cost to formation		18,694 50
Permanent way		5,106 20
Total		23,800 70

COST OF CONSTRUCTING 1 MILE OF ROAD BED.

GRADE (c) HEAVY WORK.

Items.	Rates.	Amounts.
	$ cts.	$ cts.
Clearing 12 acres	25 00	300 00
Close cutting 2 acres	35 00	70 00
Grubbing 1 acre	50 00	50 00
Earth work, 20,000 cubic yards	0 25	5,000 00
Rock work, 20,000 cubic yards	1 00	20,000 00
Minor structures		1,500 00
Engineering, $700. Stations, $150. Telegraph Line, $125. Water Supply, $150. Sidings, $400		1,525 00
		28,445 00
Contingencies, 10 per cent		2,844 50
Cost to formation		31,289 50
Permanent way		5,106 20
Total		36,395 70

(Approximately, $36,400 per mile.)

SUMMARIZING the preceding detailed estimates, the cost per section of the 343 miles is as follows :--

Section 1.—Summit Section.

216th to 230th mile, 14 miles.

This section comprises the 14 miles between the Skeena-Stikine summit and the summit of Dead Man's pass. It is chiefly an open grassy valley with a light growth of timber on the hill sides. On leaving the 216th mile, the projected location is placed in the right bank of a small stream tributary to the Stikine, which it follows to the 219th mile, and there crosses to the left bank by a structure 100 feet in length spanning a short canyon.

The line thence follows the west side of the valley, and is continued along its foothills to the 224th mile, when it begins the ascent to the pass, on the side hills of the valley of a small stream flowing to the Stikine from the pass. The grade rising to the summit is at 73 feet per mile for 6 miles, with light work. As previously noted—in the general description of Dead Man's pass—this grade can be reduced, by commencing the ascent further back, but this would considerably increase the work of construction.

APPROXIMATE COST.

14 miles light work at $13,500	**$189,000 00**
1-100 feet steel bridge on masonry	**10,000 00**
Amount	**$199,000 00**

Average per mile, $13,857.14.

Section 2.—Clappan River Section.

230th to 298th mile, 68 miles.

This section extends from the summit of Dead Man's pass—where a tributary stream to the Clappan river heads—to the junction of the Clappan and Stikine rivers.

Leaving the summit of the pass at the 230th mile, the line continues in the flat open country of the pass for a mile, then descends to the main branch of the Clappan river, on a grade of 100 feet to the mile to the 235th mile ; thence it is placed for the remaining distance on the right bank of the stream, with grades varying from 14 to 64 feet per mile.

At the 298th mile the line crosses the Stikine river, which here passes through a short narrow canyon, about one and a half miles above the mouth of the Clappan river, requiring a single span of 200 feet to clear the opening.

The Clappan river valley is timbered throughout, lightly on its upper portion, but quite heavily through the lower 40 miles ; and contains an ample supply for ties, temporary structures, buildings, &c.

The work may be classed as 60 miles of light work and 8 miles of medium. Four steel bridges will be required—1 of 50, 2 of 75, and 1 of 200 feet span—the latter over the Stikine river, all on masonry abutments. Also about 400 lineal feet of timber trestling, and 1,250 feet of crib-work protection at the foot of cut banks near the river.

APPROXIMATE COST.

60 miles light work at.................	$ 13,500	$ 810,000
8 miles medium work at............	23,800	190,400
Steel bridges on masonry.....................		45,000
Total............................		$ 1,045,000

Average per mile, $15,373.53.

Before proceeding I will here explain why the projected location is carried north from the Stikine river crossing, at the 298th mile, to the valley of the Tanzilla river, thence along that valley, in a west and south-westerly course, to the confluence of the Tanzilla and Stikine rivers, at the 390th mile, a distance of 92 miles, while the distance between these points (298th and 390th miles) by following the valley of the Stikine is but 49 miles, or practically one-half the length of the route followed by the projected line.

The 'Great Canyon of the Stikine' has its lower end at Telegraph creek village, and thence extends up the river a distance of 60 miles, or to within 17 miles of the mouth of the Clappan. The Tahltan, Tuya and Tanzilla rivers enter this canyon from the north at respectively 12, 18 and 30 miles from Telegraph creek, while the second south fork enters it from the south at 21 miles from Telegraph creek. Thus there are four tributary rivers entering this canyon in the lower 30 miles, while the upper 30 miles receives only small streams. This lower portion of the canyon occupies the bottom of a wide valley, the result of the denuding action of vast quantities of water and ice in past ages. The upper portion does not seem to have been subject to the same eroding process. In places this canyon is but an immense fissure having almost vertical walls, from 300 to 800 feet high, with the space between their bases entirely occupied by the rushing and boiling waters of the river.

Occasionally the walls of this canyon are broken into by lateral canyons that reach back for miles and marked by the same high cliff-like walls. While it is practicable, although demanding expensive work, to build a line of railway along the lower portion of this canyon, as followed by the line I have projected, from near the mouth of the Tahltan to that of the Tanzilla, some 16 miles, it is quite impracticable to construct a line within limits of reasonable expenditure over the upper 30 miles.

For this reason the location has been projected on the longer route involving an increase in the mileage from 49 miles by the Stikine valley, to 92 by the necessary detour via Ptarmigan creek, Gnat creek and the Tanzilla river.

Section 3.—Ptarmigan Creek and Gnat Creek Section.

298th to 340 mile, 42 miles.

After crossing the Stikine river at the 298th mile, the projected location enters the valley of Ptarmigan creek and follows it to its summit at the 320th mile, attaining there the maximum altitude throughout the entire line, viz., 5,300 feet above the sea.

From this summit the location follows the valley of Gnat creek to the 340th mile, where it enters the Tanzilla river valley.

At the 308th mile the projected location joins the line explored by me in 1898, from Dease lake to the Stikine river. From this point of junction, which is 47 miles south-east of Dease lake, the projected location of this year follows that of 1898 to within 4 miles of Dease lake.

On leaving the Stikine river at the 298th mile, the projected location ascends Ptarmigan creek, on a grade of 126 feet per mile for 3½ miles, generally with light work except at a small canyon, one and a half miles from the Stikine. Here a tunnel of 400 feet in length is necessary, through a narrow ridge of rock crossing the valley of the creek and causing this canyon.

From the 301½ mile a grade of 24 feet per mile for two and a half miles takes this line to the forks of Ptarmigan creek, thence 4 miles of 110 feet per mile to the 308th mile, where the line, as previously noted, joins that of 1898.

From here to the summit, at the 322nd mile, there are 8 miles of 158, and 6 of 50 feet per mile ascending grades. Thework on this portion is chiefly light, the line being generally on benches, but occasionally masses of rock debris will be encountered. From the summit, descending to the 340th mile, the grades vary from 34 to 160 feet per mile. Of this latter there are but 2½ miles. The work varies from light to medium, and is described in detail in my report on the explorations of 1898. (Vide pages 139 and 140 Report Railways and Canals for 1898-99.)

I would note here that a route between the 298th and 340th miles, other than via Ptarmigan and Gnat creeks, could probably be obtained by descending the Stikine river on the north bank (after crossing at the 298th mile) some 10 miles to a creek, that appears to come through a notch in the mountains to the north, dividing the Stikine and Tanzilla valleys, thence following this creek to its head, where the Indians report a pass exists leading towards the lower part of Gnat creek. This route is used by the Indians in winter travelling between Dease lake and the mouth of the Clappan river, and they report it as an easy trail. It would apparently shorten the distance some 6 or 8 miles, also possibly reduce the summit elevation and eliminate a portion of the severe grades in the approaches to Ptarmigan summit. In any case this route is well worthy of examination in securing the most feasible exit northward from the Clappan valley.

Over this section of 42 miles, the work may be classed as 29 miles of light, 11 miles of medium and 2 miles of heavy work.

Two steel bridges of 50 feet span each on masonry abutments at the 308th and 338th miles, are required, also a tunnel of 400 feet, as previously noted, at the 299½ mile.

APPROXIMATE COST.

29 miles light work at $13,500	$391,500 00
11 miles medium work at $23,800	261,800 00
2 miles heavy work at $36,400	72,800 00
Tunnelling, 400 lineal feet at $50	20,000 00
Steel bridges on masonry	13,000 00
Total	$759,100 00

An average of $18,073.81 per mile.

Section 4.—Tanzilla River Section.

340th to 390th miles, 50 miles.

The projected location enters the valley of Tanzilla river at the 340th mile, on the west or left bank of the river, and descends a rocky side hill on a grade of 126 feet per mile to the 343rd mile, where it crosses the river by a steel structure consisting of two spans of 100 feet each on masonry abutments and a central pier. The line is continued throughout the remainder of this section on the right bank and reaches the mouth of the river at the 390th mile.

From the river crossing to the 351st mile, where the projected location leaves the line laid down in 1898, at a point 4 miles south of Dease lake, the grade is 58 feet per mile, thence to the mouth of the river, the grades vary from 31 to 47 feet per mile.

From the 343rd to the 388th mile, the line is generally on benches, and, apart from the crossings of tributary streams, the work is light to medium. From the 388th to the 390th mile, the river runs through a canyon with sloping walls of gravel and rock, along which the work will be heavy, and furthermore, to make a feasible connection into the valley of the Stikine, a tunnel of 1,000 feet in length is necessary through the rock walls of the canyon at the immediate mouth of the Tanzilla.

The work over this section may be classed as 32 miles light, 13 miles medium and 5 miles heavy work, also 1,000 feet of tunnelling and 4 steel bridges, 1 of 200 feet, and 3 of 50 feet over all.

APPROXIMATE COST.

32 miles light work at $13,500	$432,000 00
13 miles medium work at $23,800	309,400 00
5 miles heavy work at $36,400	182,000 00
1,000 feet tunnel at $50	50,000 00
Steel bridges on masonry	34,000 00
Total	$1,007,400 00

An average of $20,148 per mile.

Section 5.—Stikine River Section.

390th to 406th miles, 16 miles.

The projected location has again reached the Stikine river valley (which is simply touched in crossing the Stikine at the 298th mile), and is placed on the right or north bank of the river, with an average grade of 47 feet per mile to the 403rd mile, and thence three miles of level on the lava beds to the 406th mile. This section will demand a large proportion of heavy cutting through rocky spurs that extend to the water's edge from the north rim of the valley.

At one and one-half miles below the Tanzilla a high narrow spur of rock, reaching across the valley to the river, and there forming a deep narrow canyon, will need to be cut through by a tunnel of about 500 feet in length; at the 401st mile another spur is encountered, which will also require 500 feet of tunnelling.

At the 402nd mile, the Tuya River is crossed near its mouth ; this crossing necessitates a high structure of about 600 feet in length, as the Tuya enters the Stikine through a canyon-like gorge. The central span would be approximately 100 feet above the water, with a clear opening of 175 feet, and supported on tower bents at either end. The approaches to the central span would be composed of tower bents, with intermediate spans.

A mile or so below the Tuya crossing, the line reaches the upper outcrop of the flat lava beds that are a distinctive feature of this portion of the Stikine Valley.

At the 405th mile there will be ai fairly heavy rock cut 1,000 feet in length, along the face of a cliff that forms the river end of a high ridge crossing the valley.

This section of 16 miles has but two miles of light work, the remainder being from medium to heavy. There are two tunnels, aggregating 1,000 feet in length, and one steel structure, over the Tuya, as previously noted.

APPROXIMATE COST.

Two miles light work at $13,500	$ 27,000
Six miles medium work at $23,800	142,800
Eight miles heavy work at $36,400	291,200
1,000 feet tunnelling at $50	50,000
Tuya Bridge, steel and masonry structure	60,000
Total	$571,000

An average of $35,687.50 per mile.

Section 6.—Tahltan River Section.

406th to 434th miles, 28 miles.

The projected location leaves the Stikine at the 406th mile and enters the Tahltan river valley, which it follows, on the left, or north, bank of the river, up to the forks of the north and south branches, at the 426th mile. The north branch is then followed, also on its left bank, to the 433rd mile. At this point the north branch, swinging abruptly to the north, leaves the main valley, and trending towards the high plateau called Level mountain, there splits into a number of small creeks. Crossing this north branch at the 433rd mile, the line reaches the end of this section at the 434th mile.

The Tahltan valley and the Valley of Hacket river—a tributary of the Sheslay, flowing west, from one continuous valley, a mile or more in average width, in which the divide between the water flowing east and those flowing west, is but a low almost imperceptible summit.

The projected line on leaving the 406th mile, requires a tunnel of 1,000 feet in length through a high ridge extending across the valley to the river, and there breaking off with almost vertical walls. Thence to the crossing of Hartz creek, at the 412th mile, the work is heavy, including a long stretch of cut clay banks ; the next two miles are medium work, and the remaining distance to the summit at the 434th mile, fairly light work on benches adjacent to the river. About 500 feet of tunnelling will be necessary through a rocky bluff at the Tahltan forks. Four steel bridges, of 50 feet span, will be required over streams.

The average grade of this section is 45 feet per mile.

APPROXIMATE COST.

20 miles light work at.	$ 13,500	$ 270,000
2 miles medium work at.	23,800	47,600
6 miles heavy work at.	36,400	218,400
1,500 feet tunnelling at.	50	75,000
Steel bridges on masonry.		22,000
Total.		$ 633,000

An average of $22,607.14 per mile.

Section 7.—Hacket River and Egnell's Creek Section.

(434th to 455th mile—21 miles.)

The projected line starting from the 434th mile, the Tahltan valley summit, at an elevation of 2,260 feet above the sea, keeps this elevation for a distance of 2 miles, to the east end of Kennicott lake.

From here the summit of Egnell's creek is distant 19 miles, and has an altitude of 4,100 feet above the sea, or a further rise of 1,840 feet. A continuously rising grade, with an average of 97 feet per mile throughout these 19 miles, can be had to Egnell's summit, but as Hacket river falls westerly and this grade rises westerly, the projected line must leave the valley and make its way entirely on the side hills that form the north boundary of the valley. This side hill work will entail a large proportion of rock, which will be especially heavy towards the head of Egnell's creek. This high side hill grade will require elevated structures over streams and lateral valleys.

On this section there will be 2 miles of light work, 14 of medium, and 5 of heavy; steel bridges will be required across 3 streams.

APPROXIMATE COST.

2 miles light work at.	$ 13,500	$ 27,000
14 miles medium work at.	23,800	333,200
5 miles heavy work at	36,400	182,00
		$ 542,200
Steel bridges on masonry		63,000
Total.		$ 605,200

An average of $28,819 per mile.

Before finally adopting the present projected location, it is essential that further explorations should be made, looking to the possibility of eliminating the severe grade of 19 miles between the 436th mile and the summit of Egnell's creek, 455th mile.

A route should be examined by following up the north branch of the Tahltan river to the head of its west fork, and thence over to the Grand valley, possibly by the head of Cache creek; this line would entail a summit probably as high as Egnell's, but by reason of greater distance the grades should be easier and the work lighter.

Another route is by the natural water courses, and while it would lengthen the line some 20 miles, would entirely do away with the Egnell summit grade and heavy work in the approaches from the east. This route is by following down Hacket river to its confluence with the Sheslay river (near the 450th mile), thence by this latter river to its junction with Nahlin, and finally ascending the main Nahlin river, and its north fork to the vicinity of the 510th mile of the projected location. The intermediate distance of 60 miles would probably be increased by one-third, but the average grades would be those of the rivers and therefore presumably fairly easy. This route is mentioned only as a final resort to obviate the severe Egnell grade, should the suggested one following up the north fork of the Tahltan not show a marked improvement on the present line via Egnell's summit.

Section 8.—Grand Valley Section.

455th to 558th mile, 103 miles.

On leaving Egnell's summit the projected line descends slightly, then rises to the summit of Cache creek, at approximately the same altitude as Egnell's. Thence, following the course of Cache creek, it descends to the main valley on a generally north course to the 480th mile, then it swings to the north-east in order to secure a crossing of the Nahlin river above the main forks and towards its head waters.

At the 506th mile, the line crosses the south branch of the Nahlin, a couple of miles above the forks, and at 5 miles further reaches the head of the north fork and the divide between the Nahlin waters, following west to the Pacific ocean by Taku river, and the Teslin waters that reach the Northern Pacific by way of the Yukon river.

From this summit the line passes through a wide valley interspersed with numerous lakes, and finally, crossing White Swan river at the 556th mile, reaches Teslin post, at the head or south end of Teslin lake, the northern terminus of the line as now projected, at a distance of 558 miles from Hazelton.

The work on this section of 103 miles is chiefly light, excepting 11 miles of medium and 2 miles of heavy. The grades vary from level, of which there is a good proportion, to 57 feet per mile; with 5 miles at 70 feet per mile ascending north from the Nahlin river crossing to the Nahlin summit.

There are 5 steel bridges necessary—3 of 50 feet span, 1 at the lower crossing of White Swan river of 150 feet, and 1 high structure of 400 feet over all, at the crossing of the south fork of the Nahlin river.

This latter bridge would preferably be an arrangement of braced tower bents connecting intervening spans, of which the central span would be about 125 feet above the bottom of the deep ravine that carries this stream.

APPROXIMATE COST.

90 miles of light work at $13,500	$1,215,000 00
11 miles of medium work at $23,800	261,800 00
2 miles of heavy work at $36,400	72,800 00
	$1,549,600 00
Steel bridges on masonry	75,000 00
Total	$1,624,600 00

An average of $15,772.81 per mile.

Summarizing the preceding detailed estimates the cost per section of these 342 miles is as follows :—

Section.	Mileage.*		No. miles.	Mean rate per mile.	Amount.
	From	To			
				$ cts.	$ cts.
I	216	230	14	13,857 00	199,000 00
II	230	298	68	15,374 00	1,045,400 00
III	298	340	42	18,074 00	759,100 00
IV	340	390	50	20,148 00	1,007,400 00
V	390	406	16	35,688 00	571,000 00
VI	406	434	28	22,607 00	633,000 00
VII	434	455	21	28,819 00	605,200 00
VIII	455	558	103	15,773 00	1,624,600 00
Grand total for 342 miles					6,444,700 00

* Reckoned from Hazelton.

This estimate covers the projected location from the Skeena-Stikine summit to Teslin lake, 342 miles and gives an average rate of $18,844 per mile.

It also completes the detailed description of the projected location on the lines explored during the season of 1900.

Description and estimates covering the remaining portions of the proposed railway from Port Simpson to Teslin (Ocean-Port Line).

These portions are the two following :—

(I.) From Hazelton to Skeena-Stikine summit, 216 miles.

(II.) From Port Simpson to Hazelton, 181 miles.

(I.) From Hazelton to the Skeena-Stikine summit, 216 miles.

The route from Hazelton, northward to the Skeena-Stikine summit was explored by me, as previously noted, in the season of 1899, and an estimate of the approximate cost of construction given in my report thereon. (Vide Report Railways and Canals for 1899-1900, page 158 et seq.)

In this report (p. 167) is given a total estimate for the 230 miles explored, viz., to a point 14 miles beyond the Skeena-Stikine summit ; deducting the amount allowed for these 14 miles (at $15,350 per mile) from this total, the cost of the 216 miles from Hazelton to the Skeena-Stikine summit is $4,356,600.

An average of $20,169 per mile.

(II.) From Port Simpson to Hazelton, 181 miles.

There yet remains the link from Port Simpson to Hazelton, 181 miles, to be estimated.

In 1879 Mr. H. A. F. MacLeod, C.E., examined and reported on Port Simpson harbour and that part of the Skeena river extending from its mouth at Port Essington to Hazelton (Vide Report Canadian Pacific Railway for 1880, page 57 et seq.) In the same season Mr. G. A. Keefer, C.E., made a trial location survey from the head of Work inlet, 32 miles from Port Simpson, to a point on the Skeena river 60 miles distant from the initial point of his survey. He also made an examination for some 20 miles farther up the river (vide Report Canadian Pacific Railway for 1880, page 71 et seq.) Mr. Keefer's plans and profiles of this survey are on file in this department, but his estimate of cost, I have not been able to trace. However, from the profiles I have worked out the detail estimates of the 60 miles surveyed, and from the reports of these two engineers and my own observations of the country along the banks of the Skeena river (necessarily limited as they were made during a canoe trip from Hazelton to Essington on my return last October) I have estimated the approximate cost of construction from Port Simpson to Hazelton, as follows :—

Port Simpson to head of Work inlet, 32 miles (described by Mr. Keefer as 'very heavy work, and some 6 miles excessively so	$1,500,000 00
Head of Work inlet to Keefer's 80th mile, 112 miles from Port Simpson, (an average for 112 miles of $43,323 per mile)	3,352,300 00
Remaining 69 miles to Hazelton (an average of $23,190 per mile)	1,600,000 00
	$6,452,300 00

An average per mile of $35,648.

This high average rate per mile is due to the very large percentage of heavy rock cuts on the lower 90 miles, but it could be very materially reduced by employing sharper curvature and a more undulating grade line in many places.

From the preceding different estimates the whole line from Port Simpson to Teslin may be summed up as follows :—

Approximate estimate, Port Simpson to Teslin lake, 739 miles.

Section.	No. miles.	Total Mileage from Port Simpson.	Mean rate per mile.	Amounts.
			$ cts.	$ cts.
Port Simpson to Hazelton	181	181	35,648 00	6,452,300 00
Hazelton to Skeena-Stikine Summit	216	397	20,169 00	4,356,600 00
Skeena-Stikine Summit to Teslin Lake	342	739	18,844 00	6,444,700 00
Total for 739 miles				17,253,600 00

An average rate per mile of $23,347.

As noted in the memorandum regarding the date used in compiling the estimate of approximate cost of construction per mile, for the different grades of work, the estimate thus obtained provides only for the ordinary buildings on a railway line and does not include such special buildings as are required at terminal and divisional points, neither does it provide for rolling stock.

Tto the previous total therefore must be added, as per memorandum below :

For special buildings and their equipment	$ 278,000
For rolling stock	1,060,100
Amount	$ 1,338,100
Previous total	17,253,600
Grant total	$ 18,591,700

This completes the estimate for the Port Simpson to Teslin line (Ocean-Port Line), and makes the average estimated cost, including rolling stock, $25,158 per mile.

OCEAN-PORT LINE.

PORT SIMPSON TO TESLIN, 789 MILES.

MEMORANDUM *of Terminal and Divisional Points, with their respective Mileage from Port Simpson, the Ocean Terminus.*

	Mileage.
Port Simpson, ocean terminus	...
Hazelton, inter. dist., 181 miles	181
Sestoot Junction, inter. dist., 126 miles	307
Clappan, inter. dist., 154 miles	461
Tahltan, inter. dist., 126 miles	587
Teslin, inland terminus (inter. dist.) 152 miles	739

MEMORANDUM *of Approximate cost of Special Buildings.*

An approximate estimate of the cost of docks and warehouses at the terminals, and also of engine houses, repair shops, coal bunkers, offices, &c., at terminal and divisional points, may be made as follows, keeping in view the amount of traffic for the first few years of operation. (This estimate, as the previous ones, is based on prices for similar works in eastern Canada.)

DOCKS AND WAREHOUSES.		
Port Simpson, ocean terminus		$60,000 00
Teslin, head of river navigation		30,000 00
Amount		$90,000 00
ENGINE HOUSES.		
2 of 6 stalls each at $9,000	$18,000 00	
4 of 4 stalls each at $6,000	24,000 00	
6 turntables at $2,000	12,000 00	
		$ 54,000 00
REPAIR SHOPS.		
2 (at terminals) at $20,000	$40,000 00	
4 (at divisional points) at $15,000	60,000 00	
		100,000 00
COAL BUNKERS.		
At terminal and divisional points, 6 at $3,500 each		21,000 00
GENERAL OFFICES.		
At terminal points, 2 at $6.500 each		13,000 00
For special buildings, total		$278,000 00

Memorandum of approximate cost of rolling stock for the ocean-port line—739 miles—in 5 divisions, of an average length of 148 miles.

ROLLING STOCK FOR ONE DIVISION.

4 engines at $15,000		$ 60,000
2 first-class passenger coaches at $12,000		24,000
2 second-class passenger coaches at $7,500		15,000
2 baggage and mail coaches at $5,750		11,500
40 box cars at $810		32,400
60 platform cars at $650		33,600
2 conductors vans at $1,200		2,400
2 snow ploughs and flangers at $2,500		5,000
Ordinary rolling stock for one division		$ 183,900
Ordinary rolling stock for five divisions, at above rate		$ 919,500
Extra equipment—		
4 first-class sleeping cars at $19,250	$77,000	
4 second-class sleeping cars at $8,000	32,000	
2 first-class dining cars at $15,800	31,600	
		$ 140,600
Total		$1,060,100

NOTE.—The amount of rolling stock necessary depends on the traffic that may be developed, and this latter is quite conjectural.

REVIEW OF THE PROJECTED LOCATION FROM PORT SIMPSON TO TESLIN.

(OCEAN-PORT LINE.)

With Port Simpson as the ocean terminus of the proposed ocean-port line to Teslin, the projected route is via the Skeena river, Dead Man's pass, the Clappan river to the crossing of the Stikine river, thence northward through the mountains by Ptarmigan pass to Gnat creek valley, the upper Tanzilla river, and the vicinity of the south end of Dease lake. (The possibility of obtaining another and probably preferable route through the mountains than that by way of Ptarmigan pass has been previously noted.)

From this latter point, near the south end of Dease lake, 351 miles from Hazelton and 532 from Port Simpson, the route, as projected, is by the valleys of the Tanzilla, Stikine (for a short distance only), and Tahltan rivers, and over into the Grand valley by Egnell's summit; finally by this latter valley to Teslin, a further distance of 207 miles; making a total of 558 miles from Hazelton, and 739 from Port Simpson.

On the 'sketch map of the north-western portion of British Columbia' accompanying this report, I have indicated the projected location, and have also shown by a broken line the general course of a possible alternative route from the south end of Dease lake to Teslin. The latter has been represented to me, by reliable white men conversant with that country, as offering a feasible route for a railway line.

By this alternative route the line would follow down the west shore of Dease lake to the mouth of Thibert's creek, ascend by this creek to the divide between the Dease and Tuya waters, thence by the Tuya river valley to the foot of Tuya lake and the head waters of Fifteen Mile river, and finally by this river to Teslin lake.

This route, if practicable, would reduce the distance between Teslin lake and the 351st mile—(4 mile south of Dease lake)—from 207 miles by the present line, to about 149, effecting a saving of 58 miles. Apart from this reduction in distance the suggested route would eliminate the heavy work of the present route at the following points: in the canyon of the lower Tanzilla; and the 16 miles along the Stikine, including the Tuya River bridge, an unavoidably expensive structure; on the lower Tahltan, and in the approaches to Egnell's summit.

A feasible route that would eliminate only the heavy work at the points just mentioned, even if it did not reduce the mileage at all, would be well worthy of careful consideration.

At the present time it is quite premature to venture any hazard as to the probable nature of the work of construction on this suggested route; but if Port Simpson is finally accepted as the ocean terminus for the proposed railway to Teslin, this route, which shortens the intermediate distance between Dease lake and Teslin lake by fully 25 per cent, should be carefully explored before a final location is adopted beyond Dease lake.

Another point in favour of this unexplored route is that it reaches Teslin lake some 12 miles farther north than Teslin village—the terminus of the present projected location—so that, in the event of the proposed railway being extended northward, there is a still further saving in distance.

Should the suggested route present serious difficulties in passing from the north end of Dease lake to the Tuya valley by way of Thibert creek, it is quite possible a line could be had by striking northward from Riley's, a point on the Tanzilla river, some 23 miles south-west of Dease Lake Junction, and thence following the Tuya valley to the vicinity of Tuya lake. This is also shown on the map above-mentioned. Indians at Tahltan village informed me that they have a trail from the Upper Tuya valley across the head waters of White Swan river (emptying into Teslin lake) through a pass in the mountains. This line would strike the projected location probably near the 520th mile, and would then follow it to Teslin.

Regarding Fifteen-Mile river, Mr. A. St. Cyr, D.L.S., reports: 'The valley of Fifteen-Mile river is easily traced inland (viz., from Teslin lake) by the high cut banks along the eastern shore. The valley appears to be thickly timbered, especially near the vicinity of the river. It is reported by the Indians to be a continuation of the Tuya valley. Both streams, they state, rise in a chain of lakes situated on the height of land, and of which Tuya lake is the largest. This valley is used by the Indians as a winter route from Telegraph creek or Dease lake to Teslin lake.'—(*Vide* Report, Department of Interior for 1897, p. 119.)

Memorandum of approximate distances from Dease Lake junction to the mouth of Fifteen Mile river, on Teslin lake, 12 miles north of Teslin village.

(1. VIA THE WEST SHORE OF DEASE LAKE.)

Localities.	Intervening Distance.	Mileage from Hazelton.
	Miles.	
Dease Lake Junction	....	351
" House	4	355
Foot of Dease Lake	25	380
3 Little Lakes	30	410
Head of 15 Mile River	30	440
Mouth of "	60	500
Intervening distance	149	....

(2.) VIA RILEY'S—23 MILES SOUTH-WEST OF DEASE LAKE JUNCTION.

Localities.	Intervening Distance.	Mileage from Hazelton.
	Miles.	
Dease Lake Junction	....	351
Riley's	23	374
3 Little Lakes	50	424
Mouth of 15 Mile River	90	514
Intervening distance	163	

NOTE.—By the projected route, the distance from Dease Lake Junction to Teslin Village, as previously noted, is 207 miles.

Owing to the narrows near the head of Teslin lake, it probably will be found advisable to extend the railway some ten miles beyond Teslin, thus placing the terminus below the constricted portions of the lake.

But the difficulties to navigation of the Hootalinqua or Teslin river during the periods of low water, and other considerations, will doubtless make it expedient to extend the proposed railway northward to a connection with the White Pass and Yukon Railway, which is now in operation from Skagway, at the head of Lynn canal, to White Horse in the Yukon territory.

From the reports in the Department of the Interior, it appears quite practicable to continue the proposed railway northward along the shores of Teslin lake and the Hootalinqua river to McClintock's portage, a distance of 100 miles, thence westerly over a low divide (600 feet above the Hootalinqua and 900 above Marsh lake) to McClintock's river, and by this river, Marsh lake, and the upper Lewes river to White Horse, a further distance of 50 miles, or a total of 150 miles from Teslin village.

While I have no authentic data other than the above reports, I think it is quite probable that this section of 150 miles could be built at an average of $20,000 per mile (eastern rates).

White Horse is approximately 450 miles from Dawson, and of this intervening distance the existing railway is already projected to Fort Selkirk, some 260 miles.

I would here draw attention to the fact that Teslin village, at the south end of Teslin lake—the present suggested northern terminus of both the Edmonton-Yukon and the Ocean Port lines—is situated at the head of a system of lake and river navigation reaching to Dawson City.

The distance to Dawson from Teslin village is about 625 miles by this water route. It was utilized to a considerable extent during the season of 1898 by medium-sized stern-wheel steamers. While some difficulty was reported to have been experienced at the latter part of the season, owing to low water on the bars of Teslin river, it is probable that this objection could be removed by dredging, and satisfactory water ensured for ordinary medium-sized river boats, during the entire season of navigation. The abandonment of the Teslin lake and river route the following year was probably due to the opening of the route from Skagway north over the White pass to Lake Bennett, as much as to the difficulties experienced in the navigation of the Teslin river.

POSSIBLE DIRECT ROUTE FROM THE SEA COAST TO GLENORA AND TESLIN LAKE.

Before closing my report on the projected location from Port Simpson to Teslin, (ocean-port line), I wish to draw attention to a possible direct route from the sea to Glenora and Teslin, which, if proved on examination to be feasible, would reduce the distance from an ocean-port to Teslin by such a very great percentage that it seems worthy of careful consideration.

This suggested route is shown on the 'Sketch map of the north-western portion of British Columbia, accompanying my report.

The proposed line would leave the sea coast either at :—

(1.) Mouth of Naas river (some 50 miles north-east of Port Simpson).

(2.) Head of Portland canal (which extends inland from the general coast line in a northerly direction about 90 miles).

(3.) Port Simpson or

(4.) Head of Alice Arm.

After leaving their respective points of departure at the sea coast, these routes all merge into a common one that follows the Valley of Naas river.

Portland inlet, some 25 miles from its mouth, divides into three branches. The eastern one forms the mouth of Naas river ; the middle one, called Observatory inlet, extends north-eastward about 25 miles where it forks, its east fork forming Alice arm, extends a further distance inland of 12 miles ; the west branch of Portland inlet reaches directly north about 65 miles from the head of the inlet, or approximately 90 miles from the coast line.

Of the heads of Alice arm and Portland canal, little seems to be generally known, apart from what information is given on the Admiralty charts. The chart of this portion of the Pacific coast shows these arms of the sea as having a width of a mile or more, with ample depth of water to their heads. Of the difficulties to steam navigation in these inland reaches of the sea, if any, I have not been able to secure information, but it is probable that strong currents of wind would obtain, possibly tidal currents as well, and also floating ice during the winter months. Satisfactory information on the above question regarding these waters could best be determined by observations on the spot, or by interviewing steamboat men who have navigated them.

HARBOURS AT THE MOUTH OF NASS RIVER AND HEAD OF PORTLAND CANAL.

In the 'Report of Progress on the Explorations and Surveys of the Canadian Pacific Railway up to January, 1874," pp. 53 and 54, are the following remarks by C. Horetzky, C.E., regarding the harbour (Salmon Cove) at the mouth of the Naas river :

'The Salmon cove is three miles long by one mile wide, and is sheltered from seaward. It has very fair anchorage, but vessels lying there would be exposed to the terrific north-easters which blow right down the Naas river.

'Captain Lewis, a gentleman of great experience upon the coast, pronounces the Nass harbour to be unsafe on that account. With the exception of this drawback, and the fact of there being but one little piece of level land (situated on the west side of the defile I have just mentioned) available, this harbour may be considered good. It can be approached from seaward by steamers at any time, but sailing vessels would experience great difficulty getting in during the prevalence of north-easterly gales, and there is no anchorage outside, the water being very deep.

'Upon the whole, the Naas river would be a very undesirable terminus for a trunk line, but, in the event of the Peace river mines turning out well, a wagon road may eventually pass that way.'

Notwithstanding Mr. Horeszky's final condemnatory remarks on this harbour, it may be worthy of future consideration and more detailed investigation.

I learned from Mr. Cunningham, a trader at Port Essington, who spent some years on the Nass river, that the head of Alice Arm offers a good site for a town, with an easy route easterly to the valley of the Naas.

Regarding the head of Portland canal I can give no information, further than such brief mention as is contained in the 'summary report of the Geological Survey Department for 1893' (pp. 11 and 12), where it is noted 'The chief characteristics of this inlet are the general uniformity of its width and the straightness of its shores, which are flanked by uniformly steep mountains.'

I.—*Route Northward from the Mouth of Nass River.*

This route would follow the Naas river, about 200 miles to the summit between it and the Nin-gun-saw, a tributary of the Iskoot, where an altitude of 2,800 feet above the sea is attained. Thence, by this latter stream and the north branch of the Iskoot river, some 74 miles further to the divide between the Iskoot and the First South Fork of the Stikine, at an elevation of 4,900 feet above the sea. From this point the main valley of the Stikine is reached by the first south fork, and thence followed on the south side of the river to a point a mile or more below Glenora village, where the line would cross the river to the north bank, on which the village is situated, reaching Glenora at a distance of approximately 320 miles from the coast. From the Iskoot summit there is apparently a very rapid descent northward for some 8 or 10 miles to the main stream of the First South Fork; but if a practicable grade can be secured here, the remainder of this route seems feasible. The elevation of Glenora being 440 feet above the sea, there would be an average descending grade of 68 feet per mile from a point 10 miles north of the summit of the Iskoot and First South Fork to Glenora, some 36 miles.

At Glenora the line turns easterly towards Telegraph Creek pass and reaches this summit in a distance of 15 miles, there attaining an elevation above the sea of 3,658 feet, which calls for an average grade of 214 feet per mile throughout these 15 miles. This is a long stretch of severe grade, but from personal inspection of the country in question, I am forced to conclude that it is unavoidable. Additional motive power will need to be provided on this grade in each direction.

From Telegraph creek summit the line descends by way of Arthur creek, and the south or main branch of the Tahltan river, 10 miles to the Tahltan forks, or junction of the main and little Tahltan rivers. Over these 10 miles the grades will be of 132 and 220 feet per mile, equally distributed.

At the Tahltan Forks—with a total distance of about 345 miles from the mouth of Naas river—the line would intersect the present projected location at the 607th mile from Port Simpson. This direct route therefore shows a saving in distance of 262 miles.

It is possible that from the summit of Telegraph creek pass the line, instead of being carried north-easterly to the Tahltan Forks, could turn to the west and reach the projected location about 9 miles west of the Tahltan Forks; if so, probably the grades would be easier than those noted in descending from the summit to the Forks.

The crossing of the Stikine river is suggested near Glenora as it would be impossible to cross at Telegraph creek village, and from there to reach the summit of the pass, a rise of 3,100 feet, with a practicable grade, the intervening distance being but 9 miles.

Possibly there may be an opportunity to cross from the head of the Iskoot to the head of the Second South Fork of the Stikine (as shown on the sketch map), thence by this stream to the Stikine valley, and following the south bank of the river to a point some 3 miles above the mouth of the Tahltan, cross the Stikine there, and intersect the present projected line near the 584th mile from Port Simpson, at an approximate distance of 310 miles from the coast by this suggested route, thereby effecting a saving in distance of 274 miles.

This latter deviation at the north end of the suggested direct route would, however, necessitate a very expensive crossing of the Stikine river at the point of junction just noted.

II.—A Route Northward from the Head of Portland Canal.

At a point some 110 miles above the mouth of Naas river a branch enters this river from the west, carrying to it the waters of Tam-a-tsi-a-ten lake. Of this lake, Mr. McEvoy, of the Geological Survey, writes : 'Tam-a-tsi-a-ten is a beautiful lake, eleven miles long, lying within the eastern mountains of the coast range. From the head or western end of the lake a low pass runs westward to Bear river, which flows into the head of Portland canal.'—(Geological Survey Report, 1893.)

From the head of Portland canal to the 110th mile, noted above, is approximately 45 miles, by way of Bear river, the low pass noted above, Lake Tam-a-tsi-a-ten, and its outlet to the Naas.

A line from the head of Portland canal, reaching the valley of Naas river, as here noted, would thence follow the previously described route to Glenora and the Tahltan forks, and with this further reduction of 65 miles, would make the entire distance from the sea coast to Tahltan forks approximately 280 miles, as against 607 from Port Simpson via the projected location, a difference of 327 miles.

III.—Direct Route with Port Simpson as the Ocean Terminus.

In the memorandum regarding the head of Kitimat Arm as a possible ocean terminus for the ocean port line (which forms a subsequent portion of this report), I have noted that a railway line can be carried from the valley of the Skeena river northward to the Naas river by way of the Kit-sum-galum river valley.

The mouth of this latter river is at 111 miles from Port Simpson, on the line of Mr. Keefer's trial location (at his 79th mile), and the distance across to the Naas about 55 miles to the point where this line would intersect the suggested route to Glenora and Teslin via the Naas river. This point of intersection would be some 280 miles south of Glenora and 437 from Teslin, making the distance from Port Simpson to Teslin, via this route, 603 miles, as against 739 by the projected line, a saving of 136 miles.

IV.—Route from the Head of Alice Arm.

About 50 miles above the mouth of the Naas river a number of small streams enter the Naas from the west ; by some one of these a line may possibly be found to the head of Alice Arm from the Naas river valley, and so determine whether an outlet could be had northward from this arm, should it be considered in the future as a possible ocean terminus for the suggested direct route from the sea to Teslin. From the head of this arm the distance to Teslin would be some 35 miles shorter than that from the mouth of Naas river, or approximately 442 miles.

The following table shows the distance from each of these four points on the sea coast to Teslin by this direct route.

	Miles.
1. From mouth of Naas river..	477
2. From head of Portland canal..	412
3. From Port Simpson..	603
4. From head of Alice arm..	442

For comparison it must be noted that the distance from the sea coast to Teslin by the present projected line (having Port Simpson as its ocean terminus) is 739 miles.

MEMORANDUM *Regarding an Ocean Terminus at the Head of Kitimat Arm.*

Kitimat arm forms the northern extension of Douglas channel, by which access is had to Kitimat directly from Grenville channel, Fraser reach and Graham reach; these three latter forming the connection between Chatham sound, opposite the mouth of the Skeena river, and Milbank sound, south of Princess Royal island, by way of the 'Inside Passage,' which is the one usually taken by coasting steamers on this northern route.

Douglas channel and Kitimat Arm have not been thoroughly surveyed, judging from the published charts, but the existing chart of this section shows ample water and denotes anchorage near the head of the Arm. Some two or three years ago the government steamer *Quadra* took the then chief engineer of the Department of Public Works, Mr. Louis Coste, to the head of Kitimat Arm, and experienced no difficulty in the navigation of this channel and arm. Mr. Coste informed me subsequently that the head of this arm affords a good harbour, with an ample extent of suitable ground adjacent for wharfs, terminals, &c.

It is probably safe, to assume that as far as ordinary navigation is concerned, Kitimat Arm will afford a fairly suitable ocean terminus.

The next question is whether a railway line can be built from this point northward to the Skeena river.

Regarding this point Mr. G. A. Keefer, C.E., in his report on the location made by him in 1879 on the lower Skeena river (Report, Canadian Pacific Railway for 1880, page 74), says : 'This state of affairs' (viz., closing of the season of canoe navigation on the Skeena by reason of ice jam), 'entirely prevented the possibility of an examination of the valley of the Lakelse to the had of Kitimat. But from all information I could gather from the Indians, and from my own observation, I infer there is no difficulty, should it ever be desirable, of carrying a line through this valley to the head of Gardner Inlet.' Gardner Inlet may be termed an arm of Douglas channel extending eastward from a point some 25 miles south of Kitimat.

As my report does not deal with an extension of the proposed railway south of the head of Kitimat Arm, Mr. Keefer's remarks cover the ground in question.

Further, in regard to a railway line northward from the head of Kitimat Arm, in the 'Report, Canadian Pacific Railway for 1877,' p. 111, Mr. Marcus Smith, C.E., states, 'The Kitimat valley, at the head of the channel, appears to be three to four miles wide and very low ; it stretches away to the north affording an easy route to the Skeena river.' In the same report, p. 138, Mr. C. Horetzky, remarks, 'Kitimat Inlet, a continuation of Douglas channel, terminates in about latitude 54 degrees, and here a large stream of the same name enters it. In the immediate neighbourhood the ground is low, especially on the north side, where the wide level valley of the river begins. This valley is about four miles wide, and extends for a very long distance northward. From an elevated position I had a very fine view of it, and I am tolerably certain that easy ground intervenes between the head of this inlet and the Skeena river.'

From the preceding it appears quite practicable to reach the Skeena river from Kitimat Arm with a railway line by way of the valleys of the Kitimat and Lakelse rivers. This railway line would reach the Skeena at a distance of about 40 miles from the head of Kitimat Arm, and would then be at a point distant 111 miles from Port Simpson. Thereby affecting a saving in distance of 71 miles, and also cutting off entirely that portion of the Skeena river where the heaviest work in construction is to be met with.

Mr. T. Richardson, who examined the Kitimat Arm in 1874, in connection with the work of the geological survey, reports that it is capable of being made a fair harbour (*Vide* Report of Geological Survey for 1879-80).

Should the head of Kitimat Arm be made the ocean terminus of the proposed 'railway from an ocean-port in British Columbia to Teslin lake' it would, by its geographical position, as previously noted, make the distance some 71 miles shorter than that by the present projected line from Port Simpson.

A comparison of the relative distances to Teslin lake from these two ocean-ports, is as follows :—

I.—Port Simpson to Teslin Lake.

	Miles.
(*a*) Via the projected location	739
(*b*) Via the projected location to Dease lake, and thence to Teslin by the suggested route to the mouth of Fifteen Mile river	681
(58) miles less than I (*a*).	

II.—Head of Kitimat Arm to Teslin Lake.

(*a*) Northward to the Skeena river and thence via present projected location	668
(71 miles shorter than 1 '*a*' above).	
(*b*) Northward to the Skeena river and thence via the route 1 '*b*' above	610
(And 58 miles shorter than 11 '*a*'.)	

Assuming that the suggested cut off from Dease lake to Teslin lake, by which some 58 miles in distance would be saved, is practicable (a question that can only be definitely settled by further explorations), the minimum distance to Teslin lake from these suggested ocean termini is :—

	Miles.
From Port Simpson	681
Kitimat Arm	610

In conjunction with the preceding remarks, in regard to Kitimat arm as the ocean terminus of the proposed railway to Teslin, it should be noted that a railway line from Kitimat to Teslin could probably be carried over a more direct route, from the point where it first strikes the Skeena river, than by the projected one following the Skeena, Dead Man's pass, Clappan river, &c.

From the point where the line from Kitimat would first touch the Skeena river, a wide, well defined valley extends in a north-west direction, through the intervening mountains to the valley of Naas river. In it lie Kit-sum-gallum river, flowing southeasterly to the Skeena, and Tseax river, flowing north-westerly to the Naas.

Mr. G. A. Keefer, C.E., in his report on the trial location survey made by him on the lower Skeena river (*Vide* Report Canadian Pacific Railway, 1880, p. 74), after stating that the valley of Lakelse and Kitimat rivers, extending southward from the Skeena to Kitimat arm, are quite feasible for the construction of a railway line, adds : 'A corresponding valley to the north of the Skeena, or rather a continuation of the same valley northward, would seem to offer equal facilities for egress to the Nass river, should such a route in the future ever come under consideration,' and later he also remarks : 'The Naas river can be reached through the valley of the Kit-sum-gallum river, to the north, and through which there is a trail to that point in present use.'

In a preceding part of my report, I have outlined what appears, from the information at present available, a feasible, and if so, a very direct route from the mouth of Naas river to Glenora and Teslin, by way of the Naas, head waters of the Iskoot, and the first south fork of the Stikine to Glenora, and thence to Teslin by routes already explored by myself.

Combining this latter and the route to the Naas river from Kitimat arm, as described in the above extracts from Mr. Keefer's report, there is then apparently a very direct route from Kitimat arm to Glenora and Teslin lake.

From Kitimat arm to the Skeena is approximately 40 miles, from the Skeena river to the Naas, by the valley of Kit-sum-gallum and Tseax rivers, is about 55 miles, or a distance of 95 miles from Kitimat arm to the Naas river.

At this point, the confluence of the Tseax and Naas rivers, the line from Kitimat would intercept the suggested 'direct route' from Naas harbour to Glenora, about 40 miles north of the mouth of Naas river, or 280 miles south of Glenora. From Glenora to Teslin is 157 miles, therefore 532 miles is the approximate distance from Kitimat arm to Teslin lake via the suggested 'direct route.'

The distance to Teslin from Kitimat arm, by the projected location is 668 miles, and by the Dease lake cut off 610 miles, therefore, the 'direct route' would effect a saving in distance of at least 78 miles, if not considerably more.

ICE IN KITIMAT ARM.

The only information bearing on this question that I have been able to obtain is from the report of Mr. C. H. Gambsy, C.E., regarding ice at the head of Gardner's inlet (*Vide* Report Canadian Pacific Railway, 1877, p. 180). Kitimat arm forms the northern extremity of Douglas channel, its head being some 50 miles from the mouth of the channel at Wright sound. From Wright sound, Gardner's inlet extends northerly, then easterly about 70 miles inland.

Mr. Gambsy reports ice from eight to eighteen inches thick at the head of Gardner's inlet for 25 miles in February, and seventeen in April of 1876. He infers that the upper 10 or 15 miles are frozen over every winter.

It is a matter of conjecture whether similar conditions obtain at the head of Kitimat arm. Possibly there the conditions favouring open water may be better, owing to its being at less distance from the general sea coast line, and having also a wider and more direct outlet by Douglas channel to the ocean.

COMPARATIVE ADVANTAGES OF KITIMAT ARM AND PORT SIMPSON FOR AN OCEAN TERMINUS.

The chief and apparently sole advantage that the head of Kitimat arm possesses over Port Simpson as an ocean terminus for the proposed railway line to Teslin is the shortening of this line by some 71 miles, and the eliminating of the heavy rock work that would be entailed in the construction of a railway along the lower Skeena river and the shores of Work inlet.

The saving in distance must be conceded to Kitimat arm, but, in my opinion, the quantities in rock excavation demanded by the profiles of the trial location on the lower Skeena could be very materially reduced by introducing sharper curvatures and steeper grades, and still keep these two essential features of the line within the limits of good modern practice for a standard guage railway.

The head of Kitimat Arm is some 45 to 50 miles north of the route of coasting steamers, called the 'Inside Passage.' It is also accessible from the main ocean (Hecate strait) by way of Otter passage, Otter channel and Cridge pass. An inspection of the chart of this portion of the British Columbia coast (fyled herewith) will show clearly the position of the head of Kitimat Arm, relatively to the main lines of steamer travel.

Port Simpson, also shown on this chart, is situated on Chatham Sound at the eastern end of Dixon's entrance, and is easily approached from the open sea by the largest steamers ; its harbour is extensive, free from ice, and fairly well landlocked. Commander Pender describes Port Simpson as the 'finest harbour north of Beaver Harbour in Vancouver island.' (*Vide* report Canadian Pacific Railway for 1877, p. 295.)

Regarding the advantages possessed by Port Simpson as an ocean terminus, I would quote from the 'Report Canadian Pacific Railway for 1880' the following extracts :—

REPORT OF MR. H. J. GAMBLE, C.E.

(p. 38.)

'By inspecting the chart it will be seen, that within the southern part of the harbour, protected by this reef from the ocean swell, is an area of about one-half mile by two. In the northern part there is a well-sheltered bay inside Birnie island, about three-quarters of a mile square. These, with the land-locked bay east of Finlayson's island, afford about five miles of water frontage on the mainland, besides a large extent on the surroundings islands.

The islands and reefs which inclose the harbour being low, vessels would not be protected from wind should it blow a gale from the west. This, in the case of small sloops, such as those which now trade along the coast, might cause inconvenience, but large vessels may be considered safe when in calm water, and westerly winds are not the prevailing ones in the winter when gales most frequently occur.

The shores of Port Simpson rise gently from the water's edge and are well adapted for the site of a city.

There is much rain in summer and frequent snow storms occur in winter, but the snow seldom lies on the ground for more than a few days.'

REPORT OF MR. H. A. F. MACLEOD, C.E.

(p. 57.)

'The steamer, drawing 10 feet, entered the harbour of Port Simpson at low tide by the southern entrance ; after waiting for an hour she passed out by the northern entrance. The main entrance is from the west between Birnie island and extensive reefs lying to the south about a mile distant ; many of these reefs are uncovered at low tide and form a good breakwater to the western sea.

The harbour is good, and is sheltered from the S.W. round by south to the N.W. westerly winds would sweep with considerable force across the harbour, but would not be accompanied by much sea. Captain Lewis, of the Hudson Bay Co., who lived there for some time, and has had long experience on the coast, considers it a very fine harbour ; he says the most prevalent gales are from the S.E. in summer, and from the N.E. in winter. The ground is not high around the shores and is sufficiently even for the site of a large town.

The approach from the ocean is good, the rocks known as the Pointers are rather to the south of the track taken by vessels from the ocean, and can be utilized as sites for lighthouses, no soundings being obtained except within a short distance of the entrance to the harbour.'

REPORT OF MR. G. A. KEEFER, C.E.

(p. 71.)

'The area of the harbour is sufficient for the purpose, possessing an anchorage of over four square miles. It is sheltered to the north and west by the shores and outlying islands but is exposed in part to the S.W. winds ; the sea, however, is broken by a reef or kelp bed forming a natural breakwater, but which does not prevent the full force of the wind being felt from that direction, and would possibly prove awkward for vessels exposed to its full force, but there is still a comparatively large area of sheltered anchorage left.

The shores are low, sloping back gradually, easy of approach and suitable for extensive wharfage, and possessing a building area of sufficient extent to meet any requirements of the future.'

The late Dr. Dawson, in the report of the Geological Survey for 1879-80 (p. 4. B.), describes Port Simpson harbour and gives an equally favourable opinion of it, as that expressed by the above engineers.

In my preliminary report on the explorations of 1899, it is noted that I visited Port Simpson on my return trip from the interior. My impressions of its harbour are fully in accord with the opinions I have just quoted. Kitimat Arm would need to possess advantages other than at present known, to enable it to be favourably considered, in comparison with Port Simpson, as an ocean terminus for the proposed railway line from the sea coast to Teslin.

A good view of Port Simpson harbour is shown on page 66 of the Album of Photographs of 1899.

In order to elucidate more clearly the preceding remarks regarding the suggested direct route from the sea coast to Teslin, the following table of comparative distances is appended :—

TABLE OF COMPARATIVE DISTANCES FROM THE SEACOAST TO TESLIN.

Routes.	Approximate Mileage.	Reduction in Mileage from Projected Location.
(A) PORT SIMPSON TO TESLIN—		
(a) Via projected location	739	....
(b) Via cut off from Dease Lake	681	58
(c) Via direct route	693	136
(B) KITIMAT ARM TO TESLIN—		
(a) Via projected location	668	71
(b) Via cut off from Dease Lake	610	129
(c) Via direct route	532	207
(C) MOUTH NASS RIVER TO TESLIN—		
Via direct route	477	262
(D) HEAD OF ALICE ARM TO TESLIN—		
Via direct route	442	297
(E) HEAD OF PORTLAND CANAL TO TESLIN—		
Via direct route	412	327

This table of comparative distances shows that the suggested direct route is entitled to serious consideration by virtue of the evidently great reduction in mileage which it would give, as compared to the present projected route.

It provides without exception the shortest line to Glenora and Teslin from any one of the possible ocean termini ; furthermore, as will be shown later, it is capable of being incorporated with the proposed line from Edmonton to the Yukon. It possesses, in addition, the advantage of striking the Stikine river at Glenora, some miles below the head of steamboat navigation, and thus would admit of the work of construction being carried on in three different directions at the same time, viz., from the sea coast northward and from Glenora both north and southward.

From what information I have been able to secure, it does not appear that very difficult country is likely to be met with, between the sea coast and the head waters of the Iskoot river.

Of the country lying to the north of these waters, between them and the main Stikine river, no detailed knowledge is available ; but from the explorations of the Western Union Telegraph Company—made over this section in 1867—it seems quite evident that severe grades will be demanded in the approaches to the divide between the Iskoot and Stikine waters, and possibly very heavy works in construction. Still, it must be remembered that the 136 miles of least distance saved by this route represents, in construction alone, at least three millions of dollars, without taking into account the amount saved in maintenance and operation; therefore, a very large outlay could be justifiably spent in the approaches to this summit, in order to bring the grades within a practicable working limit.

A careful consideration of all the points involved, impels me to look upon this direct route as the one, which a railway line from the northern British Columbia sea coast to the Yukon territory must follow, unless the topographical features of the Iskoot summit are very much more severe, from an engineering point of view, than what the limited information at hand would lead one to expect.

UTILIZING THE SUGGESTED DIRECT ROUTE IN CONNECTION WITH THE EDMONTON TO TESLIN LINE.

I wish to note here that the original scheme of utilizing a portion of the ocean-to-Teslin route, as part of the Edmonton-to-Teslin one, is also feasible, in connection with this direct route.

By the present projected location, the Edmonton-to-Teslin line joins the ocean line at the mouth of Sestoot river, a distance of 808 miles from Edmonton, and 307 from Port Simpson, and thence proceeds to Teslin, 432 miles further, by a route common to both lines.

In order to connect this Edmonton-to-Teslin route with the direct route, the former could be continued from the mouth of Sestoot river, 22 miles down the Skeena, to the mouth of the Alawkish (called 'Ka-Lan-Kees river' on my map of 1900), and thence by this river to the divide between the Skeena and Naas waters. This is a low summit of 2,900 feet elevation, with easy approaches through a wide grassy valley in either direction. From this summit the line would follow the Tum-To-Ax river to the Che-weax, and this last river to the main Naas river (a distance about 100 miles from the mouth of the Sestoot), and there join the direct route at a point about 125 miles north of the mouth of Naas river. This point of junction would be some 60 miles distant from the head of Portland canal, via the route from the canal northward as outlined. Thus, the distance from Edmonton to Teslin, via the direct route would be 1,260 miles, and from Edmonton to the sea coast at Portland canal 968.

In my explorations of 1899, I descended the Tum-To-Ax river to a point ten miles from its head (the Skeena-Naas summit), and also examined the Alawkish valley. As far as these explorations went, no obstacles were found that would interfere with the extension of the Edmonton-to-Teslin line west towards the valley of Naas river, as now suggested.

On pages 47 and 48 of the Album of Photographs of 1900 are views taken on the Alawkish and Tum-to-Ax rivers, and also on the Skeena-Naas summit that divides these waters.

This concludes my 'Report on the Explorations of the Season of 1900,' and the 'Review of the Projected Location from Port Simpson to Teslin,' as brought out by the explorations to date.

The whole respectfully submitted,

JOHN S. O'DWYER, M. Can. Soc. C.E.,
Engineer in Charge.

Ottawa, June 8, 1901.

Collingwood Schreiber, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals,
Ottawa.

Memorandum regarding the Album of Photographs accompanying Report on Explorations of 1900.

These views having necessarily been taken as the survey progressed, are shown in the album in the same sequence.

They may be briefly indexed, as follows :—

Glenora to the mouth of the Tahltan river (on the Stikine river), pages 4 to 8.

Mouth of the Tahltan river to Teslin lake, pages 10 to 16.

Mouth of the Tahltan river to the mouth of the Tanzilla river (on the Stikine river), pages 17 to 20.

Mouth of the Tanzilla river to Dease lake, Gnat creek and the head of Ptarmigan creek, pages 20 to 24.

(These last views were taken in 1898 but are shown here, as they illustrate that part of the survey of 1898, which is referred to in my report of this year.)

The trail, crossing of the Tanzilla river, some 3½ miles above its mouth, thence along the Stikine river to the mouth of Clappan river, pages 25 to 32.

These views show the most formidable parts of the 'Great Canyon of the Stikine.'

The Stikine river, from the mouth of the Clappan river to the mouth of Ptarmigan creek, thence up this creek to that point where connection was made on it with the survey of 1898, pages 33 to 35.

The Stikine river, from the mouth of Ptarmigan creek to the mouth of Jones creek, where connection was made with the survey of 1898 on the Stikine river, pages 36 to 37.

The Clappan river, from it mouth along its main branch to Dead Man's pass and the Skeena-Stikine summit, pages 38 to 46.

On pages 47 and 48 are views, taken in 1899, of the Alawkish and Tum-to-Ax river valleys and their intervening divide, the Skeena-Naas summit.

On page 54 is a view of Mount Ko-Ket-Sa, and the country in the immediate vicinity of the junction of the Sheslay and Hacket rivers and Egnell's creek.

REPORT ON THE EXPLORATIONS TO DATE IN CONNECTION WITH THE PROPOSED RAILWAY FROM EDMONTON TO TESLIN.

(EDMONTON-YUKON LINE.)

With an Approximate Estimate of the cost of Construction by J. S. O'Dwyer, C.E.

Compiled from reports of—

Dr. G. M. Dawson, F.G.S.	1879
H. J. Cambie, C.E.	1879
H. A. F. Macleod, C.E.	1879
C. Horetzky, C.E.	1879
V. H. Dupont, C.E.	1898
C. F. K. Dibblee, C.E.	1898-99
J. S. O'Dwyer, C.E.	1898-99 & 1900

Ottawa, June, 1901.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, CANADA, June 8, 1901.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals,
Ottawa.

SIR,—I have the honour to transmit you herewith a report on the explorations to date in connection with the proposed railway from Edmonton to Teslin (Edmonton-Yukon line), with an estimate of the approximate cost of construction.

The authorities used in the compilation of this report are noted in each instance.

I have the honour to be, sir,
Your obedient servant,
JOHN S. O'DWYER,
Engineer in Charge.

The proposed railway from Edmonton to Teslin, is projected to pierce the Rocky Mountain viâ the Peace river pass, which carries the Peace river through this range by a canyon of some 20 miles in length.

The entire distance may be said to have been practically covered by the explorations conducted, and reported on by the authorities quoted above.

The routes followed in these explorations, in so far as they appertain to the proposed railway, are herein briefly described, and an approximate estimate given of the probable cost of building and equiping a modern railway line of standard gauge through the country in question. The information given in the reports previously noted, being used for that purpose.

The estimated cost of construction, it must be noted, is for similar works in Eastern Canada; therefore, to it should be added to cost of transport of labourers, plant and material, as well as whatever differences there may be in relative wages.

Accompanying this report are submitted the following :—

I.—Map of the North-western Part of Canada.

On this map are indicated : the route of the proposed railway from Edmonton to Teslin; the location of the White Pass and Yukon railway, now operating from Skagway to White Horse; the projection of this latter railway north towards Dawson; and also a route by which connection could be made between these two railways, viz., from Teslin to White Horse.

II.—Profile of the Proposed Railway from Edmonton to Teslin, showing the approximate elevations above sea level over this route.

For descriptive purposes the route of this proposed railway may be divided into the following sections, viz. :—

I.—Prairie Section, 415 Miles.

Extending from Edmonton to the mouth of D'Echafaud river, at the confluence of the D'Echafaud and Peace rivers (from the initial point to the 415th mile).

II.—Central Section, 393 Miles.

Extending from the mouth of D'Echafaud river to the mouth of Sestoot river, at its confluence with the Skeena river, and comprising the valleys of the Peace, Omenica, Driftwood, Bear, and Sestoot rivers (from the 415th to the 808th mile).

III.—Northern Section, 432 Miles.

Extending from the mouth of Sestoot river to Teslin, at the south end of Teslin lake, and comprising that portion of the proposed railway from Port Simpson to Teslin (ocean-port line), by which both lines reach Teslin from their junction near the mouth of Sestoot river (from the 808th to the 1240th mile).

The approximate distance from Edmonton to Teslin viâ the projected line over these routes is 1,240 miles.

A brief description of these main sections is as follows :—

I.—Prairie Section.

Extending from Edmonton to the mouth of D'Echafaud river, a distance of approximately 415 miles.

In the early explorations for the Canadian Pacific Railway, the country embraced in this section was examined and reported on by Mr. H. A. F. Macleod, C.E., from a point on the D'Echafaud river, some 28 miles above its mouth, to the vicinity of Dirt lake, 75 miles west of Edmonton, where his exploratory line joined the location surveys from Fort Saskatchewan towards Yellow Head pass. In the 'Report, Canadian Pacific Railway, 1880,' page 65, *et seq*, under the heading 'Pine river towards Dirt lake,' will be found a detailed description of these explorations.

Accompanying the 'Report of Progress, Geological Survey of Canada for 1879-80,' is a 'map of part of British Columbia and the North-west Territory,' illustrating an included report by Dr. G. M. Dawson on explorations made by him in conjunction with Messrs. Cambie and Macleod during the season of 1879. On this map are shown the main topographical features of the country embraced, and the elevations above sea level of river crossings, watersheds, &c.

From this map and Mr. Macleod's report I have compiled the profile of the prairie section.

This route may be outlined briefly, as follows :—

It strikes west from Edmonton via Lake Ste. Anne and Isle lake to the Pembina river crossing, at the junction of the Pembina and its western tributary the Lobstick ; it then ascends to the head of the northwest branch of the Lobstick, and passes over to a branch of McLeod's river, which it descends, and crosses McLeod's river near the 110th mile. The line then follows the valley of McLeod's river to the junction of this river with the Arthabasca, and thence up the valley of the Arthabasca to the 175th mile, where it crosses the river and strikes north-westerly over the intervening divide to the valley of Smoky river. The valley of Smoky river is followed to the 235th mile, where it is left, as the river here turns away to the north-east, and the line ascends to Sturgeon lake summit, thence descending to the valley of big Smoky river, it crosses this river at the 305th mile, just below the junction with Elk river. The line ascends Elk river some 10 miles, then turning north reaches the summit of Beaver Lodge river, by way of Bear river and Bear lake and the upper portion of Beaver Lodge river. On crossing this summit, at the 365th mile, it ascends to Swan lake, and here strikes the head waters of D'Echafaud river, thence it follows the valley of D'Echafaud river to the confluence of this river and the Peace, at the 415 mile.

From Mr. Macleod's report I have estimated, that about three-fourths of the work of construction will be light, the remainder medium, with a few miles of heavy work. Seven rivers will require bridges from 100 to 600 feet over all, while there will be a number of smaller streams demanding 30 to 50 feet spans.

APPROXIMATE COST.

292 miles light work at $13,500 per mile	$ 3,942,000
107 miles medium work at $23,800 per mile	2,546,600
16 miles heavy work at $36,400 per mile..........	582,400
Steel bridges on masonry........................	249,680
Total for the prairie section (415 miles)......	$ 7,320,680

Average of $17,640 per mile.

ALTERNATIVE ROUTE FROM EDMONTON TO THE PEACE RIVER.

In connection with this prairie section, I wish to point out that an alternative route can probably be obtained from Edmonton to the junction of D'Echafaud and Peace rivers.

This route, which is shown by a broken line on the accompanying map, is as follows :—

From Edmonton a north-west course is taken to old Fort Assiniboine, on the Athabasca river, about 80 miles from Edmonton, passing over the watershed between the Saskatchewan and Athabasca rivers, and crossing the Pembina river, which flows easterly to the Athabasca.

Leaving Fort Assiniboine this route deflects westerly, keeping south of the range of high hills that extend northward to Lesser Slave lake, of which no doubt the south-west extension, reaching towards the Athabasca, would have to be crossed before arriving at the valley of Little Smoky river.

From a point about 200 miles distant from Edmonton, Little Smoky river would be followed, still on a north-west course, some 45 miles to its junction with the main Smoky river.

Here the line, turning west, would ascend the main Smoky river, 25 miles to the mouth of Wicked river, then, leaving Smoky river and resuming its general northwest direction, ascend the plateau towards the head waters of Rivière du Brûlé, Ghost river and Rat river, all flowing north to the Peace. Near the crossing of Ghost river this line would be some ten miles south of Dunvegan, a Hudson's Bay Company's post on the Peace river, and about 310 miles distant from Edmonton. At Rat river crossing the line would turn to the west and reach the projected location in the valley of D'Echafaud river, some 28 or 30 miles above its mouth.

By this route a saving in distance of probably 40 miles in comparison with the projected line would be effected. However, parts only of this alternative route have been explored and mapped, a large portion extending from Fort Assiniboine to the Little Smoky river, and thence to the forks of the main Smoky river, in all some 170 miles or more, is comparatively unknown.

Hence, it is hardly safe to assume that this alternative route is feasible for a railway line over its entire extent, until further explorations are made.

In the 'Report of Progress, Canadian Pacific Railway Explorations and Surveys up to January, 1874,' some information is given regarding that portion of this alternative line from Edmonton to Fort Assiniboine by Mr. C. Horetzky, C.E. (page 46), and Prof. Macoun (pages 68 and 69).

That part of this suggested alternative route extending from the main Smoky river to the point where it joins the present projected line—some 75 miles—was examined by Mr. H. A. F. Macleod, C.E., in 1879. His report, under the head 'Pine River towards Slave Lake,' is given in 'Report, Canadian Pacific Railway, 1880,' page 63.

In this same report for 1880 (page 45, *et seq.*), Mr. H. F. Cambie describes the country from Dunvegan to Smoky river, and thence to Lesser Slave lake by way of Sturgeon lake.

The above reports, with that of Dr. G. M. Dawson and his map, previously noted, constitute the information I have been able to obtain touching on the route of this suggested alternative line.

II.—Central Section.

This section extends from the mouth of D'Echafaud river to the mouth of Sestoot river, a distance of 393 miles, viz., from the 415th to the 808th mile, and can be best described under the following three subsections :—

(*a.*) *Peace River Subsection:*

415th to 598th mile, 183 miles.

(*b.*) *Omenica River Subsection:*

598th to 726th mile, 128 miles.

(*c.*) *Driftwood, Bear and Sestoot Rivers Subsection:*

726th to 808th mile, 82 miles.

(*a*) *Peace River Subsection :—*

This subsection comprises 183 miles along the Peace river, from the 415th mile at the mouth of D'Echafaud river to the 598 mile at the crossing of Parsnip river.

The latter crossing is made about two miles above the confluence of the Finlay and Parsnip rivers, whose combined waters are thence known as the Peace river.

This portion of the Peace river was examined and reported on by Mr. V. H. Dupont, C. E., in the season of 1898 (*Vide* Report Department of Railways and Canals for 1898-99, page 148 *et seq.*).

From Mr. Dupont's report a detailed description of the route followed by him can be had. I will quote a few extracts only. 'From the junction of the Finlay and Parsnip rivers to the boundary line on the Peace (viz., that between British Columbia and the North-west Territories), as far as facility and economy of construction is concerned, there exists no material difference between the north and south shores of the Peace river.'

'I am of opinion, however, that the south shore is preferable, except at the canyon, where a decided advantage would be in favour of the north shore, if it was not for the two crossings of the river, and the three per cent grades as spoken of previously.'

These crossings of the Peace river, Mr. Dupont states, 'would necessitate the erection of two single span bridges, 600 feet long, and the grade, although very light for the greater part, would be about three per cent for a distance of three miles from the second bridge.'

Regarding the canyon, he says : 'Peace river canyon, for 10 miles in length, is a serious obstacle to the construction of a railroad, owing to numerous creeks cutting their way deeply through the mountains, whose base is friable rock.'

Of these creeks, he mentions three in particular, requiring single spans of 300, 350 and 400 feet, at heights respectively of 200, 100 and 300 feet—rather formidable structures.

In spite of these obstacles, Peace river pass seems to be the only available one for a direct route. Pine river pass, which lies to the south some 50 miles, is fairly accessible from either direction, but it is 850 feet higher than the Peace river pass, and would entail a rather serious diversion of the route to the south-west, crossing the Parsnip river about 70 miles south of the present projected line. From this upper crossing, necessitated by the use of Pine river pass, the line would either have to descend the Parsnip river these 70 miles to join the projected line westward, or an entirely new route would require to be followed from th upper crossing westerly, reaching the Skeena by a circuitous line involving a great increase in mileage.

Therefore, it would seem that to obtain the most direct route for the line in question, the Peace river pass must be used, notwithstanding the obstacles presented by the canyon portion.

From Mr. Dupont's estimate I have computed the approximate cost of the 183 miles under consideration at $3,735,729.

An average of $20,414 per mile.

(*b*) *Omenica River Subsection.*

This subsection comprises 128 miles, extending from the crossing of Parsnip river, at the 598th mile, to Hogem pass, which forms the head of the Omenica valley, at the 726th mile.

The eastern or lower 45 miles of this subsection, viz., from the Parsnip river to the confluence of the Omenica and Osilica rivers, are included in the explorations made by Mr. C. F. K. Dibblee, C.E., in the winter of 1898-99 ; when an attempt was made to obtain a feasible route from the lower Omenica river to the head of Sestoot river, by way of the Osilica river. (*Vide* Report Department of Railways and Canals for 1898-99, page 163 et seq.)

At a point 23 miles west of the Parsnip river crossing is the 'Black Canyon' of Butler's 'Wild North Lands' ; it apparently offers no serious obstacle to the construction of a railway line.

Taking Mr. Dibblee's classification and his rates for the different grades of work, I have estimated these 45 miles as follows :—

APPROXIMATE COST.

30 miles light work at $12,000 per mile	$360,000
12½ miles medium work at $15,000 per mile	187,500
2½ miles heavy work at $20,000 per mile	50,000
Steel bridges on masonry	9,500
Amount	$607,000

The remaining 83 miles of this subsection are in the valley of the main Omenica river and its head waters, and carry the line to the summit of Hogem pass. This pass has an altitude of 3,438 feet above the sea, and forms the demarcation in this locality of the Pacific-Arctic watershed.

In the early explorations for the Canadian Pacific Railway, that part of the Omenica valley extending from the mouth of the Osilinica river to Germanson Landing, about 25 miles, was reported on by Mr. C. Horetzky, C.E., from information obtained at Germansen Landing, while the remaining portion reaching to Hogem pass, was reported on from his personal examination. (*Vide* Report Canadian Pacific Railway for 1880, p. 82 *et seq.*)

Mr. Horetzky states 'from the Hogem summit the descent through the valley of Fall river to the Omenica is comparatively easy, the gradients being in general moderate. In one or two places, however, short stiff grades of 2 per 100 may be found unadvoidable. In all other respects the Fall river valley is exceedingly favourable.'

'From Fall river to Germansen creek, the valley of the Omenica is favourable for railway construction. The valley is wide, probably averaging a mile, and the descent so gentle as not in all probability to exceed 5 or 6 feet per mile. Below Germansen creek the Omenica preserves a nearly placid course through a wide valley for 15 or 20 miles, after which it becomes rapid, and a canyon, formidable enough in high water, but passable for the frailest canoe at a low stage, intervenes. This is the 'formidable' black canyon of Butler's 'Wild North Land.'

The grades shown on Mr. Dibblee's profile from the crossing of the Parsnip to the junction of the Osilinica and Omenica rivers, a distance of 45 miles, vary from 3 to 14 feet per mile; and, from the elevation of Germansen Landing, as given by Mr. Horetzky (2,457 feet above the sea), it is probable that the grades over the intervening distance, from Mr. Dibblee's 45th mile to Germansen Landing will not exceed those on the lower part of the river.

As the Black Canyon, referred to above, is included in the lower 45 miles, already described, it appears that the remaining upper portion of the Omenica valley may be classed as entirely light work. Steel structures will need to be provided for the crossings of six streams, for which 50 feet spans will probably suffice.

From the above I have computed, as follows, the approximate cost:—

83 miles light work at $13,500 per mile	$ 1,120,500
Steel bridges on masonry	50,000
Amount	$ 1,170,500

Summing the two preceding amounts we have, for the total approximate cost, of the Omenica river subsection—

Approximate cost of first 45 miles	$ 607,000
" remaining 83 miles	1,170,500
Total for 128 miles	$ 1,777,500

An average of $13,730 per mile.

(c.) *Driftwood, Bear River and Sestoot Rivers subsection.*

This subsection embraces that portion of the railway route comprised between the summit of Hogem pass, at the 726th mile, and the confluence of the Sestoot and Skeena rivers, at the 808th mile, a distance of 82 miles.

From the summit of Hogem pass the line descends in a northerly direction along the west face of the mountains that form the east boundary of the valley of Tacla lake and Driftwod river, for some 16 miles to Buckley House at the head of Tacla lake. Thence it ascends the valley of Driftwood river to its head, a further distance of 28 miles.

At the head of the Driftwood is a low divide between the Driftwood waters, flowing to the Fraser river and Bear lake, discharging through Bear river to the Sestoot and thence into the main Skeena river.

From this divide the line follows the west shore of Bear lake to its mouth, and thence the valleys of the Bear and Sestoot rivers north and westerly to the Skeena river, a distance of 38 miles, crossing the latter to its west bank at the 808th mile, 82 miles from the summit of Hogan pass.

The 44 miles from Hogem pass to the head of the Driftwood river, were examined and reported on by Mr. Horetzky in connection with his explorations previously referred to. He states 'The Driftwood, although at a low stage, was yet very swift, the average fall in the upper portion being at least 12 feet per mile. The distance from Bear lake to Tacla, by following the sinuosities of the stream, is about 35 miles, and the difference in level between the lakes is 333 feet. The valley of the Driftwood is low, wide and of a generally easy character.' He further remarks 'It is hoped that by crossing the Driftwood river at a high level, say 75 feet above that of Lake Tacla, and keeping well up the slopes to the east of Buckley House, the Hogem pass may be reached with gradients not exceeding 1·5 per 100. In all the distance from Buckley House to the summit the mountain slopes are quite gentle and covered with forest, one or two streams running through lateral ravines alone presenting obstacles of any magnitude ; it is also probable that in order to keep down the grades, a large amount of earth excavation through the summit swamp will be necessary.'

The 38 miles from the head of Bear lake to the mouth of Sestoot river (its junction with the Skeena) were explored by me in 1899, and described in my report on the surveys of that season. (*Vide* Report, Department of Railways and Canals for 1899-1900, pp. 165 and 166.)

My explorations above noted terminated on the Driftwood river a mile south of the divide, and therefore the distance from the mouth of the Sestoot river to the end of these explorations is there given as 39 miles.

As noted in the above report a good line was obtained over these 38 miles, with fairly easy grades, and but little heavy or mediumly heavy work.

From Mr. Horetzky's report I have estimated the approximate cost of the first 44 miles of this subsection, as follows :—

Hogem Pass to Buckley House:

16 miles side hill work at $23,800 per mile.	$ 380,800
Steel bridges on masonry.	20,000
Amount.	$ 400,800

Buckley House to Head of Driftwood river, 28 miles:

Twenty-four miles light work at $13,500 per mile.	$324,000
Four miles medium work at $23, 800 per mile	95,200
Steel bridges on masonry	16,000
Amount.	$435,200

From the head of Driftwood river to the crossing of the Skeena river (mouth of the Sestoot), 38 miles (explored by me in 1899):

Fifteen miles light work at $14,000 per mile	$210,000
Twenty-one miles medium work at $23,000 per mile	483,000
Two miles heavy work at $35,000 per mile	70,000
Steel bridges on masonry	70,000
Amount	$833,000

By summing these three amounts the approximate cost of this subsection of 82 miles is therefore $1,669,000.

An average cost of $20,334 per mile.

The total approximate cost of the central section is, then, as follows :—

(a) Peace river subsection, 183 miles	$3,735,729
(b) Omenica river subsection, 128 miles	1,757,500
(c) Driftwood, Bear and Sestoot rivers subsection, 82 miles	1,669,000
Total for the central section, 393 miles	$7,162,229

An average of $18,225 per mile.

III.—Northern Section.

This section extends from the crossing of the Skeena, at the confluence of the Sestoot and Skeena rivers, to Teslin village, at the south end of Teslin lake, a distance of 432 miles, being from the 808th to the 1,240th mile.

It is common to both the Edmonton-to-Teslin and the Port Simpson-to-Teslin lines, with the point of junction at the beginning of the section, distant 808 miles from Edmonton, or 307 from Port Simpson.

In that part of my report which treats of the Port Simpson-to-Teslin line (ocean-port line), a full detailed description, with approximate cost of construction and equipment, is given for this section of 432 miles.

It is sufficient here to note that the approximate cost of this northern section may be summarized as follows :—

(a.) Sestoot Junction to Skeena-Stikine Summit, 90 miles:

(*Vide* Report Railways and Canals for 1899-1900, p. 163.)

Sixty-four miles on the main Skeena river, at $18,500 per mile, including bridges		$1,184,000
Twenty miles on the Upper Skeena—At $14,000 per mile	$280,000	
Six miles on the Upper Skeena—At $23,000 per mile	138,000	
Bridges on these 26 miles	36,000	
		454,000
Amount		$1,638,000

(b.) *Skeena-Stikine Summit to Teslin, 342 miles:*

As per estimate previously given for ocean-port line in report on the explorations of 1900	$6,444,700
Total for the northern section, 432 miles	$8,082,700

An average of $18,710 per mile.

Treating the Edmonton-to-Teslin line independently of the fact that its northern section is also a part of the ocean-port line, a summary of the approximate cost of the entire line, per sections, is as follows :—

1. Prairie section (415 miles)	$7,320,680
2. Central section (393 miles)	7,162,229
3. Northern section (432 miles)	8,082,700
A grand total for 1,240 miles of	$22,565,609

An average for the entire distance of $18,198 per mile.

But, as the construction of the Edmonton-to-Teslin line would no doubt be subsequent to that of the one from Port Simpson to Teslin, it is evidently fairer to consider the Edmonton line proper as terminating at Sestoot junction, distant 808 miles from Edmonton, where connection would be made with the Port Simpson-to-Teslin line.

Considered in this light, the Edmonton line would only comprise sections 1 and 11, and the approximate cost would be :

1. Prairie section (415 miles)	$ 7,320,680
2. Central section (393 miles)	7,162,229
A grand total for 808 miles of	$14,482,909

An average of approximately $18,000 per mile.

This estimate of cost provides only for the usual buildings on a railway line ; it is necessary, therefore, to provide for certain special ones required at terminal and divisional points, and also for a sufficient supply of rolling stock.

FOR PURPOSES OF ESTIMATING THE REQUIREMENTS FOR SPECIAL BUILDING AND ROLLING STOCK, THE EDMONTON-TO-SESTOOT JUNCTION LINE MAY BE DIVIDED INTO THE FOLLOWING SIX DIVISIONS.

	Inter. Distance.	Whole Mileage.
Edmonton (terminal)	0	0
Athabasca (25 miles east of crossing)	150	150
Smoky river crossing	155	305
Moberly river crossing	147	452
Parsnip river crossing	146	598
Old Hogem	104	702
Sestoot junction	106	808

APPROXIMATE COST OF SPECIAL BUILDINGS AT TERMINAL AND DIVISIONAL POINTS.

Edmonton (Terminal)—

Warehouses	$ 6,000	
Engine house and turntable	11,000	
Repair shops and coal bunkers	23,500	
General offices	6,500	
Sundries	3,000	
		$ 50,000

Divisional Points—

Engine house and turntable	$ 8,000	
Repair shops, coal bunkers, &c	18,500	
Amount for one divisional point	$26,500	
Amount for five divisional points at above rate		132,500

Sestoot Junction—

Extra facilities (not provided for in previous estimate) due to Edmonton line	10,000
Amount for special buildings	$192,500

APPROXIMATE COST OF ROLLING STOCK FOR THE EDMONTON-TO-SESTOOT JUNCTION LINE, 808 MILES—6 DIVISIONS OF AN AVERAGE LENGTH OF 135 MILES.

In the estimate for the Ocean-Port line, a detail is given of the ordinary rolling stock required for one division, and the approximate cost thereof given as $183,900.

Ordinary rolling stock for 6 divisions at above rate	$1,103,400
Extra equipment at the same rate as previously noted for the Ocean-Port line	140,600
Amount for rolling stock	$1,244,000

The above estimate provides rolling stock sufficient to operate this line under an ordinary traffic over the entire mileage, therefore it would probably be in excess of the earlier requirements of the line.

COMPLETE ESTIMATE FOR THE PROPOSED RAILWAY FROM EDMONTON TO SESTOOT JUNCTION.

(808 miles.)

The total cost of construction and equipment of this line—808 miles in length—may be summarized as follows :—

Cost of construction (as previously estimated)	$ 14,482,909
Terminal and divisional special buildings	192,500
Rolling stock	1,244,000
Grand total for 808 miles	$ 15,919,409

This gives an average rate of approximately $19,700 per mile, for the line complete in all details and provided with sufficient rolling stock for operation under ordinary traffic conditions.

The whole respectfully submitted.

JOHN S. O'DWYER,
M. Can. Soc. C.E., Engineer in charge.

Ottawa, June 8, 1901.

Collingwood Schreiber, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals.

APPENDIX.

It may be desirable to treat the Edmonton-to-Teslin line as the main line, and that portion of the Port Simpson-to-Teslin line which extends from Port Simpson to Sestoot junction, as an ocean branch off the main line.

For this purpose I have here appended the following summarized estimates giving estimated total cost for—

(1.) The Edmonton to Teslin line (Edmonton-Yukon Railway).

(2.) The Port Simpson to Sestoot Junction line (Ocean branch off the Edmonton-Yukon Railway).

(3.) The Port Simpson to Teslin line (Ocean-Port Railway).

SUMMARISED ESTIMATES.

(*1*) *Edmonton to Teslin, 1,240 miles. (Edmonton-Yukon Line)*—

Road bed complete with ordinary buildings	$ 22,565,609
Special buildings	343,000
Rolling stock	1,866,000
Total	$ 24,774,609

(*2*) *Port Simpson to Sestoot Junction, 307 miles. (Ocean Port Branch from Edmonton-Yukon Line)*—

Road bed complete with ordinary buildings	$ 9,170,900
Special buildings	127,500
Rolling stock	438,100
Total	$ 9,736,500

(3) *Port Simpson to Teslin, 739 miles. (Ocean-Port Line)*—

Road bed complete with ordinary buildings..........	$ 17,253,600
Special buildings..........................	278,000
Rolling stock..............................	1,060,100
Total...........................	$ 18,591,700

As previously mentioned in this report, the data used in compiling all estimates as based upon the cost of similar works in eastern Canada, to which must, therefore, be added the cost of transport of labourers, plant and material, also whatever difference there may be in relative wages.

JOHN S. O'DWYER,
Engineer in Charge.

No. 3

CANALS

SAULT STE. MARIE CANAL.

SUPERINTENDENT'S OFFICE, July 6, 1901.

SIR,—I beg to submit the sixth annual report upon the operation of this canal for the fiscal year ending June 30 last.

The canal was closed for traffic on December 16, having been in continuous operation for 237 days, and was reopened for traffic on April 20.

During the fiscal year there has been made some 2,406 lockages, passing through 3,273 registered craft and 324 unregistered craft, with a combined tonnage of 2,489,258 tons, with an average time of 15·224 minutes to each lockage. Of this tonnage, 589,530 was of Canadian bottoms, being an increase of some 15,071 tons over last year's tonnage for this class. In the total tonnage there was a falling off of some 358,296 tons as compared with last year. This can no doubt be assigned to the fact of the dredges being at work in the lower channel, thus blocking up, or nearly so, the whole of the channel, and as the channel at its best is very narrow when compared with that of the American canal, vessel captains do not use this canal when the other canal channel is not blocked.

This dredging in the lower entrance channel is necessary to make it down to a depth of 21 feet 6 inches, and when finally completed will give us a full depth of water the same as on the American side. When this dredging is done, an extension of at least 700 feet should be made to the south pier at the lower end, so as to give us more room for vessels to lie at after locking down at night and waiting for daylight to go on down the river.

The machinery is all in good working order and there has been no breakages during the year. All the buildings have been painted and kept in good repair.

Very little damage has been done to the walls and piers by vessels using the canal.

Last season was a record-breaker as regards the Lake Superior traffic, and as in former years I send a report showing the traffic to and from the upper lakes since the opening of the first canal at this point in 1855, on the American side; in 1895, the Canadian canal was opened and since that time the traffic passing through this canal is included in the report. This is obtainable by the daily exchange of vessel reports made with the American canal officials.

STATISTICS

OF THE LAKE SUPERIOR TRAFFIC PASSING THROUGH THE CANALS AT SAULT STE. MARIE, MICHIGAN AND ONTARIO.

Year.	Number of Vessels passed.	Registered Tonnage of Vessels.	Total freight Tonnage.	Cost of Carrying per Mile.	Estimated Value of freight Carried.	Percentage of fr ight carri d in Canadian Canals.	Number of Passengers.
				Tons.			
1855	No. record.	106,296	No record	Mills.	No record	....	4,270
1860	"	403,657	until 1881.	....	kept until	....	No record.
1865	997	409,962	"	....	1887.	....	19,720
1870	1,828	690,826	"	....	"	....	17,153
1875	2,023	1,259,534	"	....	"	....	19,685
1880	3,503	1,734,890	"	....	"	....	25,766
1885	5,380	3,035,987	3,256,628	....	....	....	36,147
1890	10,557	8,454,435	9,041,213	$1\frac{3}{10}$	102,214,948	$3\frac{1}{2}$	24,856
1894	14,491	13,110,366	13,195,860	$\frac{99}{100}$	143,114,502	$3\frac{1}{8}$	27,236
1895	17,956	16,806,781	15,062,580	$1\frac{14}{100}$	159,575,129	$3\frac{3}{4}$	31,656
1896	18,615	17,249,418	16,239,061	$\frac{99}{100}$	195,146,842	4	37,066
1897	17,171	17,619,933	18,982,755	$\frac{83}{100}$	218,235,927	3	40,213
1898	17,761	18,622,754	21,234,664	$\frac{79}{100}$	233,069,739	$2\frac{2}{10}$	43,426
1899	20,255	21,958,347	25,255,810	$1\frac{5}{10}$	281,364,750	$3\frac{1}{10}$	49,082
1900	19,452	22,315,834	25,643,073	1·18	267,041,959	3	58,555

The south pier on the upper entrance should be extended out about 1,000 feet to do away with the strong current setting across the channel at that point. A short time ago this was brought forcibly to our notice by several vessels drifting down on to the bank at that point, some of them doing damages to themselves. This occurred whilst the American lock was closed down owing to an accident to the gates being run into by a vessel and all the deep draught ones had to come down this way. This work should be the next undertaken, when any improvement is to be made to the approaches, and the upper channel, where it crosses the Vidal shoal should be both deepened and widened to a width of at least five hundred feet. A levelling up of the grounds should be made around the office and it would add greatly to the appearance of things in general.

A frame building for the use of the men should be built near the power house, as the small room now occupied by them in the power house is too small for their use. The staff has been efficient, and this spring there were some changes made on account of resignations of some of the men.

During the winter Mr. Fripp, the engineer in charge of the improvement works on the canal, has taken some soundings along the channels so as to make out a large plan of the two approaches showing the depth of water in and around the channels, This was something that was badly needed so that changes could be suggested in regard to the dredging and widening of the channels.

The swing dam was operated, or rather a part of the wickets were let down and the men instructed in its operation. It will be necessary to repaint it next season.

All the old wooden platforms and ladders down in the well have been taken out and new ones of iron put in their place.

The time for the completion of the pair of solid gates made with Messrs. J. & R. Miller has been extended and the gates are nearly completed. They are solid ones and made from British Columbia fir.

The floor of the lock and all the machinery under water was in good order when we pumped out the lock last fall.

Last fall we discovered that the breast wall was lifting, so this spring we put in a large number of bolts, drilling down into the solid rock for them and then filling in with cement, and we hope that this will have the desired effect and hold it down, otherwise it will be necessary to put in a wall of concrete in front of the present breast wall ; of this we will not be certain of until we are pumped out this coming fall.

I have the honour to be, sir,
Your obedient servant,

J. C. BOYD,
Superintendent.

SOULANGES CANAL.

COTEAU LANDING, August 1, 1901.

SIR,—Since my last annual report, dated September 12, 1900, work of construction on the various sections of this canal, then unfinished, has been completed, with the exception of Andrew Onderdonk's contract, where the stone road on the north bank is yet in progress, and a good deal of trimming, sodding, &c., remains to be done. The whole will, however, be completed this fall.

At the upper entrance some 3,342 lineal feet of strong iron railing has been constructed with gates, turnstiles, &c., to inclose part of the canal property. An office has also been built for the use of the collector of tolls. This is placed in a convenient position for vessel men, especially at night and is generally recognized as a much needed improvement. The grounds have been levelled off and a large number of trees planted, so that the western end now presents a fairly neat and trim appearance, without necessitating any extra outlay for maintenance ; as no gravel walks or roads have been constructed for ornamental purposes. This work of finishing will be continued on other parts of the line between Coteau Landing and Cascades Point.

It is gratifying to be able to state that there has been no recurrence whatever of the formidable earth slides on sections 8 and 9, which added so much to the estimated cost of the canal. I may also say that the protection lining has stood the wash of passing steamers fairly well, although this is of the cheapest description, consisting chiefly of rough stone and quarry waste thrown into a notch made in the face of the banks, the centre of which is about mean level of water in Lake St. Francis (155). The stone cost on an average less than $1.50 per cubic yard in place, or about $10,000 per mile for one side. A good masonry wall built to serve a similar purpose would cost at least four times as much.

Fair speed can be safely made through this canal, not because of fast working locks, but because the summit reach is 10½ miles long, or 75 per cent of the whole length of the line, and at ordinary level of the lake (155) it has a water section of about 2,500 square feet. If the midships section of a vessel of full canal size is taken at, say 42 feet x 14 feet = 588, the proportion is, say 4 to 1, and this permits of high speed without risk of damage to the banks. As a matter of fact there has been, however, only one vessel (the steamer *Arabian*) drawing 14 feet passed through the canal to date, while most of the antiquated craft now using it are of much lighter draught, so that a speed of 7 miles an hour between the guard lock and No. 4 is quite permissible. On the reach between (4 and 3, 2½ miles) the banks have been somewhat damaged by steamers and tugs running (when unobserved) at over ten miles per hour. The time of passing between these locks (3 and 4) has recently been fixed at thirty minutes or at the rate of about five miles per hour.

Ten years ago, when this canal was designed, it was considered a somewhat hazardous experiment to make use of concrete to the extent contemplated in its construction, especially on a line of navigation like the St. Lawrence, and in such a climate as that of Canada. The result has, however, proved very clearly that hydraulic structures of all kinds can be safely built of this material. It is probable that in the near future leading lines of water communication will have locks, weirs, dams, &c., made entirely of concrete which is in my opinion better suited for the purpose than ordinary stone. If the cement and aggregate are good and clean, the concrete properly mixed, placed and rammed, the resultant monolithic mass will fully answer all the purposes of masonry as usually specified for lock and weir work.

A clear proof of its excellence as a building material was afforded during the great slide which took place at the St. Emmanuel road on October 25, 1897, when the north abutment of the bridge, containing about 1,000 cubic yards of concrete and weighing at least 2,000 tons, was swept bodily into the centre of the canal, a distance of 50 feet, without the least crack or opening being developed in the mass, which sank down in an inclined position, about 19 feet into the soft greasy blue clay forming the bottom of the canal at this place. That part of the structure showing above this plane (136) had to be removed by drilling and blasting at considerable cost. The copings and steps of this abutment were of finely cut stone and did not part from the body of the concrete nor show a single open joint on examination after the accident. It is safe to say that no ordinary masonry structure would have shown similar strength. At this place concrete cost about $5 per cubic yard, including cement, and the cut stone copings $20.

The cost of concrete will be still further reduced when the manufacture of Portland cement, only now being fairly introduced here shall have attained proper proportions. The price paid for this article on the canal is greater to-day than it was several years ago. There does not seem to be any good reason for this, nor why we should have to import foreign cement, when all the requisite materials are to be had in great abundance in Canada. As, however, concrete is the coming material for public works, this state of affairs will doubtless right itself.

Structures connected with navigation will be built of greatly increased dimensions at less price than those now in existence. This will have the effect of rendering practicable projects, the estimated cost of which (if built under the old régime) would have been considered prohibitory. For example, it will greatly stimulate the idea of connecting the great lakes with the sea by a navigable channel of 21 feet—a scheme which will probably be carried out in the near future.

On the Soulanges canal, as previously stated, about 350,000 cubic yards of rock, useless for masonry, had to be excavated to form the prism. To utilise a large part of this in the preparation of concrete was obviously sound policy. From various causes but little of this vast mass now remains thrown to spoil.

There has been, approximately 52,767 cubic yards of masonry built at a cost, including cement, of $692,677, or $13.13 per cubic yard, and 161,048 cubic yards of concrete for $894,144, or say $5.55 per cubic yard. If the whole had been built of masonry at a fair all round price of say $9 per cubic yard (including cement), it would amount to $1,924,335. Were it all concrete at the above price, $5.55, it would be only $1,186,673, or a saving of $735,662. The comparative cheapness of concrete is apparent from these figures. But in addition to this there is the advantage of not being dependent on skilled labour to a large extent, also the fact that public works can be pushed on at a much faster rate than if masonry were used, and time is frequently of the utmost importance.

A large amount of the 350,000 cubic yards of rock, previously referred to, was used for protection lining instead of masonry walls. The obvious economy of this methods contrasts strongly with the plan adopted on the Manchester Ship canal where an enormous amount of money was expended on protection walls, while the present Chief Engineer, Mr. Hunter, confesses that if the canal had to be built over again the greater part of this outlay would be avoided.

Another feature which will have the effect of not only increasing the carrying capacity of canals but also of decreasing the cost of transit through them in the application of electrical power in their lighting and operation. I understand that vessels now arrange to arrive at this canal about dark because it is as easily navigable by night as by day, whereas, without light but little if any progress could be made, and that little would be dangerous both to the vessels and the canal. The Canada Atlantic Company have taken advantage of this state of affairs to push through to date this season some 5¾ millions of bushels of grain to Montreal at an extremely low figure.

A great deal more might be said on this subject, but it is abundantly clear that every improvement, no matter how small, introduced into the operation of our great waterways is of national importance.

Further examination with the sweeps revealed some obstructions at the lower Cascades end of the canal, where none were supposed to exist. The channel at the outer end of the south pier has been widened so as to improve the approach, and some shoal spots have been removed. This work will be completed shortly, and is being done under contract with Messrs. Manning & Macdonald. As stated in my last annual report, some rock was met with in forming the western channel of approach from Lake St. Francis to the full width and depth required. This is also being excavated under contract with the same parties. The work has been carried on in a slow and unsatisfactory manner, but is now nearly completed. When this is done, both the range lights can be brought into use. The outer one only is lighted now. But the arrangements are such that even at present no complaints are made by vessel men.

Pintsch gas is used in the range lights and gas buoys, so that in case of interruption to or failure of the electrical lights, the canal entrance can be safely made in any weather. The range lights are fixed and show a bright ruby red.

There is little or no current at the lower entrance from the Ottawa river. At the upper end, however, before the canal was constructed, there was a velocity in some places of over two miles per hour. This has almost been eliminated by dredging shoals and deepening to the extent of some 200,000 cubic yards, so that tows of five vessels enter with the greatest ease. Of course, the canal was not designed for such craft, but the facts serve to show that certain predictions have not been realized.

During the phenomenally low water of the fall of 1895, which was greatly the lowest recorded (or that could be conjectured) since 1819, the surface of Lake St. Francis was only 152·55 above datum of sea level, or 14·55 on the mitre sills of the guard lock (138) at Coteau Landing. Since that time the depth there has not been less than 16 feet during the season of navigation. Last year (1900) the lake level was maintained with remarkable uniformity from May to December, the mean height being 154·6. Highest, 155·0, and lowest water 154·2. This year the mean so far has been 154·9.

The lower entrance is in the Vaudreuil branch of the Ottawa river, where, as might be expected, the fluctuations are very much greater. In 1895, there was a depth, at extreme low water, of only 14·83 on the lower mitre sill (54·5) of lock No. 1. But this depth is often, during spring floods, as much as 23½ feet. This contrast shows the effect of the great lakes as compensating reservoirs. There is probably no river in the world easier of canalization, as respects fluctuations of surface, than the St. Lawrence.

It may again be stated that the lighting of the canal is quite satisfactory. There are 216 closed arc lamps, generally 480 feet apart on one side, and of 2,000 stated candle power each. The hydraulic installation at the power house, where there is a head generally of about 18 feet, has power ample for the work, but the application of electricity in the operation of the locks, sluices and bridges did not prove so easy of successful accomplishment as was represented by the various electricians, who, in the beginning, examined into the scheme proposed by me for adoption, which was, in brief, that all the gates, sluices, &c., of each lock should be operated from a single point and by one man.

A contract was entered into on this basis with the Canadian General Electric Co. in January, 1899, but owing to the cropping up of unforeseen practical difficulties, the original plan had to be greatly modified, and a supplementary agreement was entered into, on the 23rd April last, to do this in such a way that each motor will be controlled separately. This will necessitate the employment of two men at each lock, but even then this will be a great saving when compared with the cost of hand power. It is hoped that the changes will be completed this fall, but previous experience of this company's movements does not lead one to hope that the terms of the contract will be satisfactorily carried out, at least as to the time agreed upon for the completion of the work, which is the 31st October proximo.

In March, 1898, before the present site of the power house was finally determined, a contract was let to Mr. Charles H. Rayner for the construction of a large weir at this place through which the summit level could be controlled, or if considered necessary completely emptied without passing any of this great volume of water through the locks at the Cascades end. The details of this weir were modified so that it now forms the foundation of the power house, and thus serves a double purpose. This combination has had the effect of lessening the cost of the latter, which will be about $26,000. The whole installation should not cost more than $160,000 complete. The expense of operation per annum should not exceed $5,000, all contingencies included, so that this canal, 14 miles long, will be lighted in the best manner throughout and ample power supplied for working the locks, bridges, &c., for say (including interest) $10,000 per annum, which is about the same sum as is paid for the feeble gas light which makes the locks of the Welland canal partly visible at night. In both cases the bulk of the expenditure will of course be during the season of navigation.

The following table shows the amounts returned in the progress estimates for the various section of the canal up to June 30, 1901 :—

Number of Section.	Name Contractor.	Date of Contract.	Number of Contract.	Number of Progress Estimate.	Gross Amount to 30th June, 1901.
					$ cts.
1 and 2	Archibald Stewart	Sept. 24, 1892	11331	51	516,934 85
	Ryan & MacDonell	Dec. 11, 1897	12961	31	614,330 26
3	J. & M. O'Leary	Mar. 27, 1893	11515	46 (F)	199,056 44
4, 5, 6 and 7	George Goodwin	May 9, 1893	11518	31 (F)	326,246 75
	Andrew Onderdonk	April 17, 1897	12701	38	627,123 87
8	Charles H. Raynor	Dec. 29, 1892	11419	66 (F)	339,358 12
Weir	Charles H. Raynor	Mar. 1, 1898	12996	15 (F)	43,916 74
9	Manning & Macdonald	Jan. 30, 1893	11421	64 (F)	194,300 44
10	Rogers & Taylor	Sept. 24, 1892	11423	59 (F)	297,047 26
11	George Goodwin	May 11, 1892	11862	....	
	Thomas Feeny	Transfer	11862	....	
	Poupore & Fraser	"	11862	68 (F)	341,018 70
12	Denis O'Brien & Son	April 8, 1892	11178	6 (F)	26,811 15
	George Goodwin	May 9, 1893	11520	6 (F)	11,400 37
	M. J. Hogan	April 5, 1897	12693	29 (F)	203,108 70
13	Manning & Macdonald	Sept. 24, 1892	11278	76	643,949 79
Dredg'g in Canal	Manning & Macdonald	Oct. 23, 1899	13631	8	31,522 00
					4,416,125 44

Note (F) means that a final estimate of the work has been forwarded to Ottawa. The final estimates for sections 1 and 2 and 13 are now nearly completed. The above return shows an additional expenditure of $145,377.59 to that given on page 182 of the departmental report for 1900.

OPERATION.

Last season the canal was closed on December 6. Fortunately a partial thaw set in on the 5th, otherwise trouble would have been experienced with the lock gates, as ice about six inches in thickness had already formed at the lower entrance into the Ottawa river at Cascades point.

There was no interruption to the passage of vessels in 1900, except on May 26 to 28, when as stated in my last report (printed) some changes were made in the sluice gates at lock No. 1. Two thousand nine hundred and seventy-six vessels of all kinds (not including tugs), passed through the canal last year. The Canada Atlantic Railway sent down thsi year from Parry Sound, about 11¾ millions of bushels of grain. Nearly 8¼ millions came down the St. Lawrence, or in all say 19½ millions. A considerable amount of coal and package freight was also carried to Montreal.

To give an idea of the carrying capacity of the canal under proper conditions, I may say that if this grain were loaded in barges of full size (say 80,000 bushels each), it could be passed down in less than ten days, at the rate of, say thirty lockages per diem, which, if the barges were well handled would not interfere with a large movement of other freight through the canal.

This year the canal was opened on May 1, and no delay whatever has occurred to date. The men on the locks can now turn the handles properly, and do not wind up the counter-weight of the sluices as formerly. As previously stated, the machinery of the gates is now operated with ease. The sluices, 6 feet x 6 feet under 25 feet head can be rapidly raised by two men although the pressure on one of these is then about 30 tons. The gate and sluice machines are strong and simple and the danger of accident, even under existing conditions, is small.

Experience has demonstrated fully that the manner of filling or emptying the locks of this canal has been a real benefit to the navigation. The water being admitted to the chamber through ten 30-inch tubes on each side, placed exactly opposite to each other, has the effect, in a measure, of neutralizing the disturbance which otherwise would follow the introduction of some 300,000 cubic feet in about five minutes. At all events there is little or no surging on the lines, as so frequently occurs where the old plan is in use, and a very considerable element of danger both to the vessels and the locks is in this way removed. This is especially important as bargemen persist in using lines long after they have become so worn as to part very easily, and this cannot well be discovered until after an accident has happened.

It is expected that the electrical power will be applied to the working of the locks, bridges, &c., this fall, when the number of men required to operate the canal will be considerably reduced.

Up to date the Canada Atlantic has sent 5¾ millions of bushels of grain this way, and the St. Lawrence has given 3¾ millions, or an aggregate of 9½ millions, principally wheat and corn. About 160,000 tons of coal has passed down to Montreal, together with some 23,000 tons of general merchandise.

A fleet of four steel steamships, equipped for navigating either the lakes or salt water of full canal size and intended to trade directly between Chicago and European ports was started from the west this spring. An ice-jam which occurred in the St. Clair river in May, delayed two of them for several days ; and owing to an accident at Sparrowhawk point the *Northwestern* after her release from the ice was run ashore in the river. She was soon got off, however, and without much damage. This was an unfortunate beginning, but all four crossed safely to Liverpool, Hamburg or Antwerp. Only two have returned so far. It is not known here if the venture will prove profitable, owing to the very high rates of insurance which handicap the St. Lawrence route, and there is, of course, at first difficulty in obtaining return cargoes promptly. Another vessel, built at Dundee, in Scotland (and of full canal size, is on her way out here now from Manchester with a full cargo for Chicago. No doubt there will be many trials and some failures before regular lines are established, but ultimate success seems certain as the advantages which follow direct trade, and the avoidance of transfers must be great, and a profitable traffic will be developed with second-class European ports, and carried on profitably by steamers of comparatively small tonnage.

There is no doubt whatever that a practicable channel of 14 feet at the present stage of the water exists via Canadian canals and the St. Lawrence between Lake Erie and Montreal. The great lakes are now tapped for vessels of from 2,000 to 2,200 tons, and it seems inevitable that with such a vast and rapidly increasing volume of trans-Atlantic trade our national route must, even with its present restricted dimensions obtain a considerable share of it. The vessels of the Comselman fleet fit the locks so as not to leave much space around them, but hitherto their draught when passing through this canal has been only from 12 to 13 feet.

It is, however, encouraging to know that several vessels of the kind which our canals were made to accommodate, are in course of construction at upper lake ports and elsewhere. That is to say, now that we have got a 14 foot navigation after working at it for about thirty years, a beginning has been made to build a fleet, which can utilize this enormous outlay to the best advantage, and it is to be hoped that there is little or no truth in the premature conclusion arrived at by some transportation theorists, that the 14 foot Canadian canals will fail to divert commerce from the lake and railroad lines of New York, the principal business of which centres in Buffalo.

In my last report I referred to the preparation of plans of piers, &c., intended to form sheltered berths for the spare gates, gate lifter, &c., at the lower end of the canal at Cascades Point.

The contract for this work, which has become urgently necessary, has been let to Messrs. Quinlan & Robertson, and will be pushed ahead as fast as possible. The site chosen is on the north side of the canal, in a well sheltered bay, and is easily accessible in case of accident to the gates of the canal. It is also out of the reach of ice action in the spring, which is a source of great danger in this vicinity. The repair shops will be put in hand later on. At present little or no repairs of any kind are necessary.

It is hoped that at the furthest, the next season of navigation will be begun with the canal completed in every particular, and the electrical apparatus in full and successful operation. No exertion will be spared to ensure this.

I have the honour to be, sir, your obedient servant,

THOMAS MONRO, M. Inst. C.E.,
Superintending Engineer.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer, Railways and Canals,
Ottawa, Ont.

QUEBEC CANALS.

MONTREAL, September 4, 1901.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Railways and Canals,
Ottawa.

SIR,—I have the honour herewith to submit my annual report on the works under my charge for the fiscal year ended June 30, 1901.

The canals in this division are the Lachine and the Beauharnois on the St. Lawrence route; the Ste. Anne, the Carillon and the Grenville canals, on the Ottawa river, and the St. Ours lock and the Chambly canal, on the Richelieu river.

Of these, the Lachine canal is by far the most important, on account of its immediate connection with the harbour of Montreal, the great export centre of the Dominion.

The traffic through it has rapidly increased of late years, owing to the development of industries and agriculture in western Canada and the Canadian North-west, and it will certainly take a still greater importance with the completion of the deepened canals, especially when adequate facilities for handling freight and grain shall have been provided.

The Ottawa canals afford a most convenient route for the transportation of the produce of the extensive forests of the Ottawa valley, a large proportion of which finds its way to the United States through the Richelieu river canals.

LACHINE CANAL.

Length, 8½ miles; 5 locks, 270 by 45 feet; 14 feet water on sills; total rise, 45 feet.

Old locks, 200 by 45 feet; still available with 9 feet of water on sills.

Mr. Denis O'Brien was appointed overseer of this canal on June 14, 1900, vice John Conway, who had died on May 2 previous, the position of overseer having been filled in the meantime by Mr. George Yale, superintendent of the canal dredging fleet.

The following interruption to navigation occurred during the year: Six hours on October 11, 1900, while repairing Brewster's bridge, which had been thrown off its pivot by steamer *Alexandria*; and nine hours on November 21, 1900, while repairing Côte St. Paul bridge, where a similar accident happened, the barge *Frontenac*, in tow of steam tug *Jackman*, having collided with the said bridge during a terrific wind and thunderstorm. In both cases the cost of the repairs was paid by the owners of the boats.

Another accident, which might have been attended with serious consequences, happened on May 6, 1901, when the steamer *Monkshaven* on her trip upwards collided with the upper gates of lock No. 5, the lower gates being opened. Fortunately, the gates were not thrown down, and the damage was speedily repaired.

REPAIRS AND RENEWALS.

The water was drawn out of the canal on March 15, and readmitted into it on April 30, 1901.

Repairs and renewals were executed as follows during the year :—The cast-iron rollers under Wellington bridge, 96 in number, were replaced by cast-steel ones, which are giving entire satisfaction.

Over one hundred arc lamps were repaired by the canal electricians at our own shop.

Four pairs of gates were remodelled, and the Townsend valves in them replaced by butterfly valves, which are much more satisfactory.

A new set of stop logs, 18 inches by 18 inches and 50 feet long were provided for new lock No. 5.

The masonry at the west of the pier between flour shed basins Nos. 1 and 2 was taken down to water level and rebuilt, partly with the old stone and partly with concrete, a strong cast-iron snubbing post being placed at that point.

Slope walls at several points of the canal were repaired while the canal was unwatered in April.

Each of the five new locks was provided with four cast-iron mooring posts, set in a heavy block of concrete. These were rendered necessary owing to the increased size of the vessels using the canal since the deepening to 14 feet was completed.

The roadway above Wellington bridge, along the north side of the canal, 650 feet long and 40 feet wide, was macadamized, iron dross being placed over a heavy bed of stone.

The bridges, locks, buildings, roads, fences, wharfs, &c., received the usual attention during the year.

I beg to call your attention to the fact that owing to the larger class of vessels now using the canal, the passage-way both at Brewster's and Côte St. Paul bridges is practically too narrow. The swing at those points only covers a channel 45 feet wide on either side of the centre pier, the outer side of each channel being formed by a small isolated pier acting as abutment for the swing bridge, as well as for a fixed span from it to the bank. I would strongly advise the replacing of the said two antiquated bridges by steel structures of sufficient length to dispense with the fixed spans.

REGULATING WEIR AT LACHINE.

The object of this work is to ensure the proper feeding of the canal.

A number of mills, located between Côte St. Paul and Montreal, use the canal water as propulsing power, and owing to the large quantity of water consumed by them, it had become a very difficult matter to keep the canal at regulation level during periods of low water on the St. Lawrence. This state of affairs was of no serious importance until the deepening of the St. Lawrence canals to 14 feet navigation was completed. But it is now imperative to have the full depth of 14 feet on the lock sills at all times, and the new regulating weir just completed will ensure this.

The work has been executed under contract by Mr. M. J. Hogan. Operations were begun on April 18, 1900, and brought to a termination on May 13, 1901.

The two centre piers in the old weir have been preserved, two new piers and abutments being constructed, providing eight new sluices by means of which the area of waterway was doubled. The head and tail races are now 50 feet wide at their narrowest points, and their sides lined with heavy rock face masonry walls laid in Portland cement. The widening of the head race has necessitated the lengthening of the fixed bridge between the two locks and the insertion of an additional stone pier to support it.

A heavy boom has been placed at the upper entrance to the weir in order that vessels using the small lock may approach it with safety.

The plans and specifications for this regulating weir had been prepared by Mr. L. G. Papineau, but Mr. G. L. Viger had charge of the contract.

NEW LOCK FOR LOWER ENTRANCE OF LACHINE CANAL.

Two sets of plans were prepared last fall with a view to replacing the present locks of the 200 x 45 feet type which were built in 1843.

In the first case it was proposed to preserve such portions of the old work as would be sound and to lengthen the locks to 270 feet to make them conform with those of the present St. Lawrence route. In this system the gates of the 200 feet lock were to be retained as intermediate gates, the smaller lock thus created to be used in passing market and passenger boats in as short a time as possible.

The second system contemplated one large lock 375 feet long, 50 feet in width, with 20 feet of water on the sills to take the place of the present locks Nos. 1 and 2. It was to have been built on the site of the old entrance lock and would have extended into old basin No. 1, equivalent basin space being provided at the upper end near Black's bridge.

The water level in the new basin would have been the same as in basin No. 2.

Of the two systems submitted the latter was adopted and tenders for the work invited in September, 1900. No contract, however, was awarded, and I was instructed to prepare new plans and specifications for a lock 600 feet long, 50 feet wide, 30 feet lift and with 20 feet of water in the mitre sills, and a pair of intermediate gates dividing the lock into two chambers, one 375 feet and the other 225 feet long.

Tenders for this new scheme were called for in January last, but no contract has been awarded at the time of writing.

PONTOON GATES.

A sum of $20,000 was appropriated under the above head towards providing a patented gate to be tried on Côte St. Paul lock. It is the invention of Mr. C. N. Dutton, C.E., of New York, and consists of a strong steel structure in the shape of an arc of a circle spanning the entire width of the lock. When placed in position it will add about 50 feet to the length of the chamber. Should a tail gate be inserted at the lower end of the lock the total length gained would be in the neighbourhood of 150 feet. Some years ago Mr. C. N. Dutton made a proposition to the Minister of Railways and Canals to so lengthen all the locks on the St. Lawrence and Welland canals, the cost per lock to be between $60,000 and $70,000.

This gate is to be tried on one of the locks on the Lachine canal, provided a similar one built by Mr. Dutton for the Erie canal would prove satisfactory.

Owing to the conditions of the metal trade in the United States for the last two years, the gates intended for the Erie canal could not be finished in time for a trial last summer as promised. It was, however, inspected in November, 1900, by Mr. L. G. Papineau and myself at the Edgemoor Bridge Works, where it was being constructed and there seems to be no doubt that it will prove to be a practical and satisfactory method of lengthening our locks at a moderate cost.

POWER-HOUSE AND ELECTRIC STATION.

The new electric station for the Lachine canal is located at the Côte St. Paul lock. It will consist of a brick building 38 feet 6 inches x 45 feet, resting on concrete and masonry foundations. At the north-west corner a semi-detached tower from which the various lines transmitting the power and the light to the locks and bridges from Brewster's bridge to the end of the long entrance pier at Lachine will issue.

The foundations were built by day's labour and carried above water level before the 1st of May last ; the balance up to the level of the main floor was finished towards the end of May.

The upper or brick part of the building is being erected under contract by Messrs. J. B. Gratton & Co.

The hydraulic machinery consisting of two 60-inch turbines to drive the generators, and a smaller wheel for the exciter is now in position. These with two water wheel regulators have been supplied by the Wm. Kennedy & Sons, Ltd., of Owen Sound.

A wooden flume to carry the water from the upper reach to the turbines, a distance of 305 feet, was built during April, 1901, the contractors being Messrs. O. Martineau & Son.

Two more contracts have been awarded in connection with the electric installation, one for the electric machinery, controlling and distributing apparatus, as well as arc and incandescent lamps to the Canadian General Electric Company ; the other for poles, wire, cables and erection of the distributing lines from Brewster's bridge to the end of the entrance pier at Lachine, a distance of seven miles, to Messrs. Ahearn & Soper, Ltd., of Ottawa.

The work under these two contracts was progressing at the close of the fiscal year.

SLOPE WALLS ABOVE CÔTE ST. PAUL.

This work is under contract with Mr. J. B. de Lorimier since October, 1899.

The portion of the walls below water line can only be repaired during the short time, when the canal is unwatered every spring ; the completion of the work may, therefore, be delayed several years.

The repairs on the north bank of the canal are in a fair state of progress and should be very nearly completed before July, 1902. The south side has not been touched yet.

DEEPENING RIVER ST. PIERRE.

I have much pleasure in reporting this work, as completed, and in stating that the effect of the deepening has already been felt in a very satisfactory manner. There were no complaints about flooding by the stream last spring, and the chances are that little will be heard of River St. Pierre until such time as the ever increasing pollution of its waters by the various kinds of refuse discharged into them by factories and municipalities, will have rendered it a menace to public health.

The work was done under contract by Messrs. Brewder & McNaughton. Mr. L. G. Papineau was in charge of the various works above described, except the regulating weir at Lachine.

DEEPENING BETWEEN LOCK NO. 2 AND LOCK NO. 3.

This work is steadily going on. The bulk of the dredging last year was done in the St. Gabriel basins ; basins Nos. 1 and 2 are now deepened to 15 feet.

A large quantity of material was also excavated during May and June last in connection with the rebuilding of the south wall of basin No. 2 from Black's bridge westward.

A good deal of difficulty is experienced in disposing of the excavated material. A large quantity of it was deposited on the north bank of the canal at St. Henri and on the south bank of Côte St. Paul. The town authorities have agreed to remove it free of charge and are to use it in raising and improving their streets.

LAKE ST. LOUIS CHANNEL.

As reported last year, this work was completed during the month of June, 1900.

The engineering staff, however, was engaged all last summer and winter cross-sectioning the channel, and preparing the final estimate, as well as a second set of cross-sections showing the actual depth of the channel.

Soon after the opening of navigation last spring the necessary spar buoys were placed in such position as to clearly indicate both sides of the new channel, and two large gas buoys anchored at the turning points.

The gas tanks ordered for the two range lights at the Lachine wharf were put in position late last fall. They are 4½ feet in diameter and 7 feet high. The lights in the towers are pulsating ones, the period being 10 seconds bright and one second dark. The channel can now be navigated with perfect safety day and night.

During May last, the depth of the new channel was thoroughly tested with the sweeping scow belonging to the Montreal harbour commissioners. The lower portion was found to be free from any obstruction, but a few boulders were located immediately below the Dorval shoals. They were undoubtedly carried into the cut by moving ice. These boulders are now being removed by the canal dredge.

REBUILDING WALL AT BASIN NO. 2.

Work on this wall could only be resumed on the 19th April, owing to high water in the St. Lawrence, which at times backs up into the canal as far as lock No. 3. It was continued until the end of the month, 250 feet of the new wall being built up to the bottom of the old one.

REPAIRS TO VESSELS.

Besides the usual overhauling of the vessels composing the canal dredging fleet, a considerable amount of work was done in connection with the tug *Frank Perew,* lately added to the fleet. On examination of it last fall, it was found that its hull had to be almost entirely removed. This work, as well as a general overhauling of the machinery, was completed in time for the opening of the season. The boiler, however, was only temporarily repaired as it was found to be so far gone, that a new one will have to be procured next winter. When this has been done the tug will be in perfect condition.

The wooden boom of the floating steam derrick being no longer safe was replaced by a steel one 70 feet long, and steel wire rope substituted for the heavy and cumbersome hoisting chain formerly used. In addition to the above changes, a pair of swinging engines operated independently of the main engine was placed on the derrick thus increasing its capacity in a very marked manner.

WRECKING SCOW.

This scow is intended for use in repairing breaks on any of the canals in this division. It is 56 feet long, 22 feet beam and 5 feet deep. Part of the deck is covered over by a cabin 30 feet x 17 feet wherein the following machinery, &c., has been placed: A twenty-five horse-power boiler, a hoisting engine, a 6-inch centrifugal pump, a portable forge, ropes, pulleys, jack-screws, steam fittings, spikes, nails, blacksmith's and carpenters' tools, &c.

It is to be kept in the Lachine canal, and can at very short notice be towed up to any point where a break-down has taken place, thus doing away with delays in getting together the necessary appliances required for repairs.

The deepening of the canal between locks No. 2 and No. 3, the rebuilding of the wall on the south side of basin No. 2, the finishing of the work on Lake St. Louis channel, the repairing of the dredging fleet vessels, and the building of the wrecking scow were in charge of Mr. L. S. Pariseau.

BEAUHARNOIS CANAL.

Length, 11¼ miles ; 9 locks, 200 feet x 45 feet ; 9 feet of water on sills ; total rise, 82½ feet.

Since the opening of the Soulanges canal to navigation, the traffic through the Beauharnois canal has been very light, a few market boats only using it. The day will soon come when it will have to be permanently closed. A number of bridges, roads, &c., will, however, have to be maintained by the department unless the whole canal were leased for industrial purposes.

REPAIRS AND RENEWALS.

The canal locks, bridges, banks, buildings and other structures were kept in good repair throughout the year. The waste weir at lock No. 10, which had been carried away in 1899 and had been replaced by a temporary timber one was rebuilt during last spring, the old stone being used.

A large quantity of stone was deposited along the road on the Hungry Bay dyke, and a considerable portion of the said road freshly macadamized last spring.

SURVEYING AND MARKING LAND BOUNDARIES.

During the month of June last, boundary stones were planted, marking the property purchased last year by the department along both sides of the Hungry Bay dyke. This has been a long and tedious work on account of the heavy spring rains, whereby the swampy lands along the dyke have been kept full of water.

PROTECTION DYKE ALONG THE SOUTH SHORE OF LAKE ST. FRANCOIS IN THE PARISH OF STE. BARBE.

This work is now completed, except the refilling of some of the pits, where clay for the dyke was taken. The farmers can now undertake the draining of their lands and do the necessary filling when required. The dyke is 12,297 feet long, 4½ feet wide and averages about 5 feet in height.

PROTECTION WALLS ON THE NORTH SHORE OF LAKE ST. FRANCOIS.

These walls were completed by Messrs. Dussault & Pageau, contractors, during the fall of 1900.

A gap was left on the front of the farm of Mr. McKie, who refused to give the necessary right of way over his land, because he considered the wall as built too weak to last.

The portions built, however, have sustained the test of the winter and of last spring's flood without showing any sign of weakness, and I am satisfied that it can be kept in good repair by the farmers whose property has been thus protected at a very small cost.

The total length of the walls is 3,903 lineal yards.

Mr. L. S. Pariseau superintended the building of these walls, and of the dyke on the opposite side of the lake, as well as the planting of the boundary stones at Hungry bay.

CHAMBLY CANAL.

Length, 12 miles ; 9 locks, 118 feet x 22½ feet ; 6½ feet of water on the sills; total rise 74 feet.

Navigation was uninterrupted on this canal during the year.

REPAIRS AND RENEWALS.

Outside of the ordinary works of maintenance, the following repairs and renewals were executed during the year :—

Lock No. 4.—The upper sill was raised and the foundations rebuilt with concrete as well as the lock gate platform.

Lock No. 6.—The lower sill was treated in the same manner as the upper sill of lock No. 4.

Waste Weir No. 2.—This waste weir which is 75 feet long was almost entirely rebuilt, concrete being used in the abutments.

Bridge No. 1.—The abutments on the towpath side were rebuilt.

Bridge No. 2.—One abutment was rebuilt.

Guide Pier at St. Johns.—The filling of the top of this pier with gravel in lieu of the old planking was completed during the year, and the west side of the pier sheeted with 4-inch tamarack. The two boom piers immediately above the guide pier were taken down and rebuilt.

Wharf at Chambly.—A part of this wharf, 208 feet long, was taken down and rebuilt last fall.

Boundary Stones on Ste. Thérèse Island.—A strip of land from 4 to 27 feet wide was purchased a couple of years ago for the purpose of widening the towing path. The fence along that strip had been built in 1899-1900, but the boundary stones were only laid during last year.

Iroquois River Bridge.—This bridge is on the public road alongside of the canal. The old cribwork abutments were removed and concrete ones resting on piles substituted. The superstructure consists of strong iron girders and iron railings.

Both approaches were raised and macadamized. The work was completed in May last.

ST. OURS LOCK AND DAM.

Length of canal, ⅛ mile ; one lock 200 x 45 feet ; 7 feet of water on the sills ; total rise, 5 feet.

There was no interruption to navigation at this point last year.

The lock and its approaches, as well as the grounds, buildings, fences, &c., were kept in good repair during the year.

Between Chambly and Sorel, the Richelieu river is provided at various points with land marks, beacons, &c., indicating the channel. Most of them are in a state of decay, and it is a question as to whether the Department of Railways and Canals or the Department of Public Works, or again, the Department of Marine and Fisheries, should restore and maintain them.

In the absence of instructions with regard to these land marks and aids to the navigation, I think it my duty to call your attention to their present condition and to state that they should be attended to without delay.

REPAIRS TO DAM.

The St. Ours dam in connection with the lock at this point, is a cribwork structure 690 feet long, 30 feet wide and about 15 feet high. The superstructure of it, and the covering especially, had become considerably decayed and worn out so that a large quantity of water went through it lowering the level above the structure in a very appreciable manner. To remedy this state of things, it was decided to rebuild the superstructure of the dam, and to this effect a contract was awarded to Messrs. Fynn & Filion on the 29th September, 1900. The contractors commenced operations shortly after and at the close of navigation had some 200 feet of the dam completed, except the covering. A sudden rise in the river, however, prevented their finishing it, and until the close of the fiscal year, the state of the water did not permit the work to go on.

The repairs will be completed during the fall of 1901, under the supervision of Mr. L. S. Pariseau.

OTTAWA RIVER CANALS.

STE. ANNE'S LOCK.

Length of canal, ⅛ mile ; one lock 200 x 45 feet ; 9 feet of water on sills ; total rise, 3 feet. Old lock still available, 200 x 45 feet ; 6 feet of water on sills ; total rise, 3 feet.

Navigation at this point was uninterrupted during the last fiscal year.

All the structures in connection with the lock were kept in a good state of repair, and the following works were executed beyond ordinary maintenance :—

The south face of the pier on the south side of the lock was rebuilt on a length of 200 feet and the filling raised a couple of feet.

The puddle trench commenced the year before in order to staunch the south wall of the old lock, was continued a length of some 30 feet being done.

The roof of the overseer's house was covered with Canada plate.

CARILLON AND GRENVILLE CANALS.

Carillon Canal.—Length, ¾ miles ; 2 locks, 200 x 45 feet ; 9 feet of water on sills ; total rise, 16 feet.

Grenville Canal.—Length, 5¾ miles ; 5 locks, 200 x 45 feet ; 9 feet of water on sills ; total rise, 43¾ feet.

Both these canals are under one overseer. They are separated by a stretch of navigable river about five miles long, and between them is to be found the old Chute-à-Blondeau lock which has been abandoned since the completion of the dam at the head of the new Carillon canal in 1883, the rise at that point having been practically obliterated.

M. H. G. Simpson, having sent in his resignation as superintendent of these canals on December 12, 1900, Mr. James B. Cushing was appointed overseer in his place on February 1, 1901. Mr. Francis J. Lynch, resident engineer filling the position during the interregnum.

REPAIRS AND RENEWALS.

Beyond ordinary repairs little was done on these canals during the last fiscal year.

A couple of scows to be used in connection with the gate lifting apparatus.

Two of the boom-piers at the upper entrance to the Carillon canal were rebuilt from the water line to the top, and a piece of dry wall about 150 feet long, 13 feet high was built on the north side of the upper approach to Lock No. 6, by which this approach was considerably improved.

The lower approach will be attended to in the course of next winter, the necessary stone for the walling to be done having been purchased last fall.

GUIDE PIER AT THE UPPER ENTRANCE.

The work contemplated here is the renewal of the upper part of the pier concrete being substituted for the old timber work.

The pier is about 800 feet long, 30 feet wide and stands about 16 feet above normal low water.

Messrs. Martineau, Fils & Lemoine, signed the contract for the work on April 30, 1901, but had not commenced operations at the close of the fiscal year.

Mr. Francis J. Lynch is in charge of the above works.

GRENVILLE CANAL ENLARGEMENT.

As stated in my last annual report, this work was completed by Messrs. Piggott & Ingles, contractors, in May, 1900.

The details of final estimate were forwarded to you on March 1, 1901.

The widening of the section now completed has proved quite an improvement, especially as regards the approaches to lock No. 5, and the cutting off of a point above the lock which had always been a serious obstacle to navigation.

I have the honour to be, sir, your obedient servant,

ERNEST MARCEAU,
Superintending Engineer, Quebec Canals.

QUEBEC CANALS.

Opening and closing of navigation.

——	Closing.	Opening.
	1900.	1901.
Lachine Canal	3rd December	1st May.
Beauharnois Canal	1st "	17th "
Chambly Canal	4th "	2nd "
St. Ours Lock	3rd "	25th April.
C. & G. Canals	30th November	29th "
St. Anne's Lock	28th "	24th "

LACHINE CANAL.

STATEMENT of Fines and damages collected during the fiscal year ending the 30th June, 1901.

Date.	Name of Vessel.	Name of Owner.	Fines.	Total.
1900.			$ cts.	$ cts.
Oct. 26	Str. *Alexandria*	E. B. Smith	10 00	10 00
1901.				
May 31	Tug *Plover*	Is. Clement	5 00	5 00
June 22	" *May*	"	5 00	5 00
		Totals	20 00	20 00

LACHINE CANAL.

STATEMENT showing the depth of the river water on the mitre sills of old Lock No. 1, at lower entrance and old Lock No. 5, at upper entrance, during the fiscal year ended June 30, 1901.

MONTHS.	OLD LOCK No. 1, LOWER SILL.				OLD LOCK No. 5, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
1900.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July	19	4	16	11	12	6	11	1
August	17	9	16	3	11	8	10	8
September	16	2	15	7	10	8	10	2
October	16	4	15	5	10	6	10	0
November	18	8	15	0	12	2	9	10
December	29	3	16	1	11	8	10	4
1901.								
January	29	2	25	9	12	1	9	9
February	26	10	24	5	11	8	9	4
March	27	1	23	6	11	9	8	10
April	39	8	22	9	14	10	11	3
May	22	10	19	3	14	9	12	8
June	19	10	17	6	13	3	11	8

LACHINE CANAL.

STATEMENT showing the depth of the river water on the mitre sills of new Lock No. 1, at lower entrance and new Lock No. 5 at upper entrance, during the fiscal year ended June 30, 1901.

Months.	New Lock No. 1, Lower Sill.				New Lock No. 5, Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1900.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July	21	6	19	1	17	6	16	1
August	19	11	18	5	16	8	15	8
September	18	4	17	9	15	8	15	2
October	18	6	17	7	15	6	15	0
November	20	10	17	2	17	2	14	10
December	31	5	18	3	16	8	15	4
1901.								
January	31	4	27	11	17	1	14	9
February	29	0	26	7	16	8	14	4
March	29	3	25	8	16	9	13	10
April	41	10	24	11	19	10	16	3
May	25	0	21	5	19	9	17	8
June	22	0	19	8	18	3	16	8

BEAUHARNOIS CANAL.

STATEMENT showing the depth of the river water on the mitre sills of Lock No. 6, at lower entrance, and Lock No. 14 at upper entrance, during the fiscal year ended June 30, 1901.

Months.	Lock No. 6, Lower Sill.				Lock No. 14, Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1900.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July	11	8	10	9	11	10	11	5
August	11	3	10	8	11	6	11	2
September	10	7	10	0	11	5	10	11
October	10	3	9	10	11	2	10	6
November	10	11	9	9	11	7	10	5
December	10	8	10	2	11	6	10	8
1901.								
January	14	10	10	10	11	11	11	3
February	16	4	14	0	11	6	11	0
March	14	1	13	0	11	10	10	6
April	14	7	13	4	12	4	11	4
May	13	10	12	2	11	10	11	2
June	12	7	11	5	11	11	11	2

CHAMBLY CANAL.

Statement showing the depth of river water on the mitre sills of Lock No. 9, at lower entrance, and Lock No. 1, at upper entrance, during the fiscal year ended June 30, 1901.

Months.	Lock No. 9. Lower Sill.				Lock No. 1. Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1900.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July	11	5	9	11	9	7	8	6
August	9	11	9	0	8	7	8	0
September	9	3	7	9	8	5	7	4
October	8	7	7	8	8	0	6	10
November	14	1	8	3	9	5	7	0
December	13	11	11	0	9	9	8	0
1901.								
January	15	10	12	6	9	6	8	9
February	17	5	15	1	9	1	8	8
March	16	8	13	3	10	2	8	5
April	24	11	16	11	12	10	10	2
May	18	7	15	1	12	7	11	1
June	15	1	12	7	11	2	9	11

ST. OURS LOCK.

Statement showing the depth of the river water on the mitre sills of St. Ours Lock, during the fiscal year, ended June 30, 1901.

Months.	Lock No. 1. Lower Sill.				Lock No. 1. Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1900.	Ft.	In.	Ft.	In.	Ft,	In.	Ft.	In.
July	11	8	9	6	9	7	8	7
August	9	8	8	3	8	7	7	10
September	8	2	7	4	8	0	7	3
October	8	8	7	0	8	9	7	6
November	11	7	6	10	12	0	8	6
December	11	10	9	11	10	2	9	3
1901.								
January	11	3	9	3	9	5	7	10
February	10	2	8	8	8	7	7	7
March	15	7	8	6	12	0	7	10
April	25	3	15	9	21	2	12	2
May	17	9	13	5	14	6	11	10
June	13	8	11	0	12	0	10	4

STE. ANNE'S LOCK.

STATEMENT showing the depth of river water on the mitre sills of the Ste. Anne's Lock, during the fiscal year, ended June 30, 1901.

MONTHS.	LOCK NO. 1. LOWER SILL.				LOCK NO. 1. UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1900.								
July	12	5	11	1	14	7	11	11
August	11	8	10	7	13	5	11	10
September	10	7	10	2	11	9	11	2
October	10	5	10	1	12	1	11	9
November	11	9	10	0	13	2	11	5
December	11	7	10	5	12	7	11	4
1901.								
January	12	2	10	9	11	5	11	2
February	11	7	9	11	11	6	10	5
March	11	9	9	4	11	8	10	3
April	15	1	11	5	17	6	11	8
May	14	5	12	9	17	2	14	9
June	13	3	11	9	15	2	13	0

CARILLON CANAL.

STATEMENT showing the depth of river water on the mitre sills of Locks Nos. 1 and 2, Carillon Canal, during the fiscal year ended June 30, 1901.

MONTHS.	LOCK NO. 1, LOWER SILL.				LOCK NO. 2, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1900.								
July	16	2	13	1	16	4	13	4
August	14	7	13	0	14	10	12	8
September	12	11	12	2	12	10	12	0
October	13	3	12	10	13	7	12	5
November	14	10	13	0	14	7	12	5
December	14	5	12	9	13	7	12	5
1901.								
January	13	2	12	10	17	8	13	5
February	13	2	12	4	17	8	14	1
March	13	6	11	7	14	0	11	4
April	19	9	13	4	20	0	12	2
May	19	3	16	5	19	10	16	11
June	16	11	14	0	17	7	14	3

GRENVILLE CANAL.

Statement showing the depth of the river water on the mitre sills of Locks Nos. 3 and 7, Grenville Canal, during the fiscal year ended June 30, 1901.

Months.	Lock No. 3, Lower Sill.				Lock No. 7, Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1900.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July	20	0	16	2	17	2	13	9
August	18	1	15	5	15	6	13	0
September	15	5	14	6	12	10	12	0
October	16	3	15	0	13	8	12	9
November	17	6	15	3	15	8	12	4
December	17	0	15	6	13	11	12	8
1901.								
January	20	0	15	8	12	8	10	10
February	23	7	19	5	10	10	9	10
March	21	7	16	0	10	6	9	5
April	24	9	16	8	21	0	11	0
May	24	6	20	7	20	10	17	8
June	21	4	17	3	18	6	14	8

TRENT CANAL.

PETERBOROUGH, August 30, 1901.

SIR,—I have the honour to submit the annual report on the works on the Trent canal under my charge for the fiscal year ending June 30, 1901.

The Trent canal is a term applied to the several water stretches lying for the greater part along the valley of the Trent river, between the Bay of Quinté, on Lake Ontario and Georgian bay, on Lake Huron, which, however, in their present condition does not form a continuous line of navigation. The object of the works at present going on is to connect these several water stretches by short canals so as to form a continuous line of land-locked navigation from Lake Huron to Lake Ontario. A glance at the map of the district will show how comparatively small the length of waterway to make or improve is to the length already provided by nature in the way of its beautiful and deep lakes and rivers. The total distance between Lake Huron and Lake Ontario is about 200 miles. By utilizing the numerous lakes and rivers and taking advantage of the natural features of the land to make flooded reaches, it is hoped that not more than 15 or 20 miles of the total length will be actual canal. The Imperial government as far back as the year 1835 chose this route as being the most natural and feasible to make a water communication between Lake Ontario and Lake Huron and they spent considerable sums in carrying out this project, and in fact a sufficient sum of money was voted by the government at that time, to construct that part of the work lying between Lake Ontario and Balsam lake. The works then constructed have ever since been used for local traffic.

When the two divisions at present under construction are completed, a continuous line of navigation between Heeley's falls and the ports on Lake Simcoe, a distance of about 160 miles, will then be available. Though a draught of six feet is provided on all the sills the lands necessary to flood for a draught of eight feet, has been purchased on the new sections at present under construction, so that if required a draught of eight feet could be provided at a comparatively little extra cost.

MAINTENANCE.

Navigation closed on the upper reach November 26, 1900, and opened April 22, 1901. On the lower reach navigation closed November 26, 1900 and opened April 27, 1901.

The height of water on the mitre sills of the locks was very fair throughout the season, though there is still room for much improvement in regard to the regulation of the water on the different reaches. The regulation of the water is under three different managements, namely, the Dominion government, the Ontario government and the lumbermen, consequently it is not surprising that there are complaints regarding the management of the water during the dry season. Owing to the immense country drained and the country becoming every year more cleared, the proper regulation of the water becomes more difficult. The regulation of the water also between Peterborough and Lakefield is, under the present circumstances, very unsatisfactory. Owing to the mills at Lakefield using all the surplus water, any temporary stoppage in the mills almost stops the entire flow, in consequence of which the mills below are often stopped for a time. If the mill-owners at Lakefield were to notify the caretaker of the dam at Lakefield when it was necessary to stop temporarily for repairs, the cause of complaint would be removed.

With reference to the water supply it is not generally known that such a vast system of reservoirs exists as there are in the country to the north of the direct route of the canal. From a recent survey of these reservoirs it was ascertained that there are over fifty dams at present constructed which control about 70,000 acres of water in which over 25 billion cubic feet of water can be stored, not considering the large quantity that could also be stored by many new dams which could be constructed but which do not at present exist. The proper storing and regulating of the large quantity of water above referred to is a most important matter, not only to navigation but to the vast commercial interests that are located along the valley of the Trent.

The total number lockages for the season was 4,328, though this does not fairly represent the traffic on the canal, as owing to many of the longer routes of the steamers not passing through a lock, no record of the traffic is kept. There are thirty steamers engaged in commerce on the reach between Lakefield and Balsam lake besides a large number of small steamers belonging to private individuals.

There are seven steamers on the reach between Peterborough and Heeley's falls and several on Lake Simcoe. Many of the larger steamers are of considerable size some of them carrying as many as 450 passengers.

REPAIRS.

The following repairs were executed at the different stations.

CHISHOLM'S RAPIDS.

The dam at this station is in such a bad condition that it would be a waste of money to repair it. A new dam is required.

HEELEY'S FALLS.

The only works at this station is a dam which is made up of two sluice ways and 451 feet of flat tumble dam. An appropriation was made at the last session of parliament for the construction of four new sluice ways in this dam, in order that more control may be had over the water in the reach between Heeley's Falls and Hastings. This work is being proceeded with at the present time.

HASTINGS.

The lock walls were pointed and some small repairs were done to the swing bridge. The dam, which was a very old structure, was repaired by removing part of the old flat tumble dam, and constructing three new sluiceways in place of it. The construction of these new sluiceways has been a great improvement as it gives much greater control of the water during the spring freshets. When the new sluiceways are constructed at Heeley's Falls, the facilities for regulating the water at these two stations will be about as perfect as can be.

PETERBOROUGH.

The lock walls were pointed and minor repairs were done to the dam which is in a very bad condition. An appropriation has been made for the construction of a new dam. The lock gates are very old and leak badly, but new gates are to be constructed this year.

OTONABEE RIVER.

The new channels which were dredged were buoyed out and the river was snagged.

LAKEFIELD.

New stop-logs were provided for the dam and the platform of the dam was repaired.

YOUNG'S POINT.

The Lakefield Portland Cement Company were about to construct a large power house below the dam, through the two west sluices, of which the water passed through to the power house. The dam was in a leaky condition and the company asked that the dam be put in a suitable condition to correspond with their work. An appropriation was made for this purpose, and the portion of the old dam in front of the power house was removed, and a new concrete dam with four sluices was constructed in its stead. The foundation of the concrete cut-off, bedow the stop-log sills, was excavated to the rock and all the sluiceway piers were excavated to the solid bottom.

STONY LAKE.

The buoys marking the navigation channel were painted and some new buoys were added. These buoys are constantly being removed by the drives of logs passing down the channel, and some stringent measures will have to be taken to prevent the removal of these buoys by the carelessness of lumbermen.

BURLEIGH.

The swing bridge was repaired and the platform over the dam was partly refloored ; some stop-logs were supplied for the dam.

LOVESICK.

The works at this station are in good repair. The lock gates were painted and some minor repairs were done to the dams.

BOBCAYGEON.

Te lock and canal are located on limestone rock, through which run fissures in every direction. A great deal of money has heretofore been spent on this lock and canal in order to make them water-tight. A cut-off wall of concrete was run at right angles to the line of the canal at a distance of about 50 feet above the lock. A trench for this wall was excavated to the solid rock on the bottom, and run into the solid material on the sides. A wall of concrete was placed in this trench. Short side walls and a floor of concrete connect the lock with the cut-off. A most satisfactory job has been done and the heavy draft at this lock has been stopped for the first time. The power flume at the south side of the lock was also re-floored and the lock wall between the lock and flume was caulked.

The swing bridge was painted and the track on the pivot pier was lined up.

INCOME.

The following work chargeable to income was executed :—

OTONABEE RIVER.

The navigation channel at 'Yankee Bonnet' was dredged for a width of eight feet and a depth of six feet. The channel was also buoyed out.

KATCHAWANNOE LAKE.

The channel at the 'Three Islands' was widened and straightened to a width of eighty feet and a depth of seven feet.

BUCKHORN.

The channel through the sawdust shoal below the lock was dredged for a width of one hundred feet and a depth of seven feet and buoyed out.

FENELON FALLS.

Five guard piers, sixteen feet square, were built at the upper entrance to the canal, on which were placed a double line of timbers which form a guard at this point.

CAPITAL.

Construction.

Section No. 1, Simcoe—Balsam lake division. The contract for this work was awarded to Andrew Onderdonk on April 22, 1895. There was only a small amount of work remaining to be done at the date of my last report, and this has been satisfactorily completed.

Section No. 2, Simcoe—Balsam lake division. The contract for this section was awarded to Messrs Larkin & Sangster, on September 7, 1900. The work on this section is being persecuted with energy, and a large force of men are employed in excavating. No structural work has so far been done.

Section No. 3, Simcoe Balsam lake Division. The contract for this section was awarded to Messrs. Brown & Aylmer, on September 6, 1900. This firm are making fair progress with their work. The only work so far are clearing, excavating and fencing. No concrete work has been done up to the end of the fiscal year.

Section No. 1, Peterborough—Lakefield division. The contract for this section was awarded to Messrs. Brown, Love & Aylmer, on August 19, 1895. This section is about in the same condition as it was at the date of my last annual report. The only work to be done is the completion of the dredging in the channel below lock No. 1, at Lakefield. The dredge was not obtained by these contractors till late last fall and only one cut was made. The high water this spring prevented an early start being made this season. This work should be completed by the end of October.

Section No. 2, Peterborough—Lakefield division. The contract for this section was awarded to Messrs. Corry & Laverdure, on May 21, 1896, and the time for completion was fixed by this contract on November 1, 1897. As has been reported so often before, the progress being made on this section is very slow . From the mode of operations adopted by this firm, it is difficult to say when this contract will be completed. About the only works remaining to be done is in connection with the hydraulic lock. The main retaining wall is up about three-quarters of the completed height and the wing walls are the same level. The east and west chamber walls are completed and work on the centre walls is being proceeded with. On an average only about 150 yards of earth per day is being excavated by the steam shovel whose capacity should be about 1,000 cubic yards per day.

Press Wells.

The contract for the excavation and the foundations of the main press wells for the hydraulic lock was awarded to Messrs. Corry & Laverdure, on January 15, 1900, and they were to be completed on May 1, following. This contract has been satisfactorily completed with the exception of a small part of the tops of the wells which are delayed in order to make a proper junction with the floor when it is put in.

Hydraulic Lock.

The contract for the steel work in connection with the hydraulic lock was awarded to the Dominion Bridge Company. The date in the contract calling for the completion of this work was May, 1900, but owing to the concrete work nor the press wells not being completed it was impossible to commence the erection of the steel work. Only such parts of the steel work as is to be embedded in the concrete has so far been supplied. This includes the Taylor Air Compressor, which is almost completed. A great part of the required material has been delivered on ground leased to the government on which an advance has been made to the contractor.

Port Hope Route.

The surveys, plans and estimate of the cost of the proposed route via Port Hope has been completed and forwarded to the department.

Plant.

The dredge *Otonabee* was employed continuously throughout the year. Up to the end of September the dredge was loaned to the Department of Public Works for deepening the navigation channel at Lindsay. For the balance of the season it was leased to the contractors, Messrs. Brown, Love & Aylmer for excavating the channel below Lakefield.

The dredge *Trent* was employed for a great part of the season in removing the shoals in the Otonabee river, between Peterborough and Wallace Point bridge.

Tug 'Empire.'

The tug *Empire* has been fully employed throughout the year at hauling scows of dredged material from the dredge, buoying out the navigation channel, delivering timber, gravel and stone for the various works of repair along the route.

I have the honour to be, sir, your obedient servant,

RICH. B. ROGERS, M. Ins., C.E.,
Superintending Engineer.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Railways and Canals.

STATEMENT showing the Highest and Lowest Water level at each Lock on the Trent Canal for the fiscal Year ended June 30, 1901.

Stations.	July.				August.				September.				October.				November.				December.			
	Highest.		Lowest.		Highest.		Lowest.		Highest.		Lowest.		Highest.		Lowest.		Highest.		Lowest.		Highest.		Lowest.	
1900.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft,	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Hastings	7	2	6	8	7	1	6	10	7	4	6	10	7	3	6	10	7	5	6	10	7	1	6	3
Peterborough	7	5	6	3	7	5	6	9	7	6	6	9	7	5	7	1	7	6	5	3	7	6	6	0
Lakefield	5	10	5	2	5	8	5	4	5	8	5	1	5	7	4	10	5	8	5	0	5	6	5	2
Young's Point	7	4	6	6	7	3	6	6	6	5	6	2	6	1	5	5	5	7	5	0	5	7	5	½
Burleigh Falls	6	5	5	3	6	0	5	11	6	1	5	10	6	3	5	10	6	0	5	10	....	....	....	....
Lovesick	6	7	6	0	6	7	5	9	6	2	6	0	6	3	5	11	6	1	5	10	....	....	....	....
Buckhorn	6	5	6	4	6	6	6	3	6	3	5	9	5	8	6	0	5	11	5	9	5	8	5	7
Bobcaygeon	7	2	6	5	6	11	5	10	5	10	5	5	5	5	5	0	5	8	5	0	6	3	5	9
Fenelon Falls	6	2	5	8	5	11	5	9	6	2	5	11	5	11	5	6	6	5	5	6	6	0	5	9

Stations.	January.				February.				March.				April.				May.				June.			
	Highest.		Lowest.		Highest.		Lowest.		Highest.		Lowest.		Highest.		Lowest.		Highest.		Lowest.		Highest.		Lowest.	
1901.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Hastings	6	3	5	9	6	5	6	3	7	1	6	3	9	0	7	0	8	8	6	4	7	6	6	10
Peterborough	6	4	5	10	6	2	5	10	5	10	8	1	6	6	8	8	7	3	8	8	5	8	7	9
Lakefield	6	2	5	1	5	8	5	3	5	1	5	0	6	3	5	1	6	2	5	1	5	9	5	4
Young's Point	5	7	5	1	5	6	5	5	5	7	5	4	9	5	5	5	9	3	7	8	9	1	7	8
Burleigh Falls	....	....	....	....	....	....	....	....	....	....	....	....	6	2	5	2	6	4	5	8	6	5	6	0
Lovesick	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8	2	6	7	8	2	7	0
Buckhorn	5	7	5	3	5	3	5	0	6	0	5	10	7	4	6	3	8	3	6	8	7	7	6	9
Bobcaygeon	6	3	6	1	6	3	5	9	6	3	5	4	7	8	6	7	7	3	6	10	7	5	7	0
Fenelon Falls	6	3	6	0	6	0	6	0	5	0	....	....	....	....	....	....	....	....	5	9	6	7	5	6

RIDEAU CANAL.

SUPERINTENDENT ENGINEER'S OFFICE,
OTTAWA, July 4, 1901.

SIR,—I have the honour to submit herewith, my annual report on the Rideau canal, under my charge, for the fiscal year ended June 30, 1901.

Navigation closed at Ottawa, November 29, 1900.
" " Kingston Mills, November 24, 1900.
" opened at Ottawa, May 1, 1901.
" " Kingston Mills, May 1, 1901.

The depth of water maintained in the various levels throughout the whole season of navigation was excellent; no trouble on account of low water having occurred anywhere.

The freshet this spring was exceptionally violent, and the ice, which was unusually thick, moved out before it was honeycombed, and caused considerable damage to our works at various stations (as will be detailed below, under seperate headings); but I am glad to be able to report that we were able to repair the damage without any delay to navigation.

The principal works and repairs performed along the line of the canal, at the various lock stations, is as follows:—

OTTAWA.

One pair of lock gates was renewed in lock No. 8. Portion of the coping on the east side of lock No. 8 was taken up and renewed, it being the intention to renew the west side this year. Some of the hollow quoin copings were also renewed; and we have a few more of these stone, ready cut, and they will be put in this year. The roadway round the basin wharfs was repaired, and the planking of the wharfs was renewed in places where it required it. A large number of boulders were removed from the basin, and the life-saving chains round the face of the wharfs and approaches to the locks were overhauled and repaired.

STEWARTON SWING BRIDGE.

The pivot and the two rest piers of the bridge were rebuilt from low water mark up, and the protection piling up and down stream from the bridge piers, being worn out, was cut down and open cribwork substituted therefor; and sundry small repairs made to some of the bents, flooring, and handrailing of the bridge; the work having been done by our own carpenters.

HARTWELL'S LOCK STATION.

Sundry small repairs were made to this station, and the tow path road was gravelled and repaired in places.

HOG'S BACK LOCK STATION.

Considerable damage was done to this station by the ice during the late freshet. One of the bents in the east bulkhead was carried away (rendering it impossible to put in the stoplogs until it was replaced), and the protection boom was broken in four places. The damage has been repaired without delay to navigation, however. The long cribwork pier below the west bulkhead was renewed, as well as portion of the planking of the apron below the same. Small repairs were made to the swing bridge ; and some gravel was placed on the tow path road. Some winter sash were purchased for the lock house. The chamber wall on the west side of the lower lock will have to be taken down and rebuilt next winter. This wall has bulged out to a dangerous extent, and has for many years been held in place by iron rods passed through the stone, being fastened at the back into cribwork. Last summer I had test pits sunk to ascertain the condition of the timber, and found it completely rotted away, so that the lock wall has now no support therefrom.

BLACK RAPIDS LOCK STATION.

Four ice breaker cribs, with a triple boom connecting them were built here. This had the effect of preventing much damage being done by the ice, although the boom was broken, but not before it had served its purpose. The down stream side of the long retained dam was replanked with 4-inch plank, and repairs were made to the bulkhead and station in general.

LONG ISLAND LOCK STATION.

The two wing walls of the upper lock were taken down and rebuilt as far as the gate recesses, the work having been done by our own mason, and the stone having been taken out and cut by them last summer, in Elgin quarry: One pair of lock gates were renewed, one pair of new swing beams were put on, and four new chain blocks put in place. A considerable quantity of clay was put in front of the bulkhead, the pockets of which were washed out. The masonry of the locks is gradually being grouted with Portland cement ; but as a very large quantity of this will be required, it is being done year by year. The upper sill of the upper lock, and one of the lower piers of the middle lock will require to be rebuilt soon, but there is no immediate necessity for this ; and it will be attended to in due course.

MANOTICK BRIDGE.

Small repairs to the planking were made from time to time by the bridge tender. One of the trusses of one of the small spans gave way last fall, but was repaired at once without any delay to travel. Provision has been made in the current estimates to rebuild the whole bridge (excepting the swing pan, which is comparatively new), this coming winter.

WELLINGTON BRIDGE.

Small repairs to the planking, painting, &c., were made by the bridge tender.

BECKET'S LANDING BRIDGE.

Small repairs made by the bridge tender. This bridge is getting old now, and in another year will require to be entirely rebuilt.

BURRITT'S RAPIDS LOCK STATION.

Sundry small repairs were made to the station in general. Some gravel was placed on the dam and bulkhead repaired.

NICHOLSON'S LOCK STATION.

The lock gates and swing bridge were painted, some gravel was placed on the dam, and sundry small repairs were made to the station in general.

CLOWES' LOCK STATION.

One pair of lock gates were renewed. The center bent of the waste weir was carried away by the ice during the late freshet, but 30-feet stoplogs were put in, instead of two sets of short ones, so navigation was not delayed. As the weir at this station is particularly exposed to the full force of the freshet each spring, I think that it would be best to leave it as it is at present with long stoplogs, instead of rebuilding the bent in the centre, as the latter is liable to be carried away every spring.

MERRICKVILLE LOCK STATION.

One pair of lock gates were renewed. The north waste weir was entirely built by our own carpenters. The south wall of the upper basin, which failed last spring, was rebuilt by our masons, the stone being supplied by contract with Mr. A. White, of Burritt's Rapids. Portion of the station was grouted with Portland cement ; but as at other stations, this has to be done year by year. Two sheds (one for cement, and the other for our portable engine) were erected complete by Mr. Alex Mills, of Merrickville, for the sum of $150. As the masonry at this station requires a large amount of repairs, these sheds will be required for some years to come. The freshet this spring took out four or five stones from one of the lower courses of the bridge across the by wash, but they will be replaced as soon as the water falls low enough to do the work.

MAITLAND'S LOCK STATION.

Small repairs were made to the station, and to the dry wall above the lock.

EDMOND'S LOCK STATION.

Sundry small repairs were made to the station. The ice this spring damaged the stone dam and weir ; but this will be repaired in due course, there being no danger to navigation.

OLD SLY'S LOCK STATION.

The bulkhead was entirely renewed. Two pairs of sluice frames were put in, and sundry small repairs were made to the station in general.

SMITH'S FALLS COMBINED LOCK STATION.

One pair of lock gates were renewed. Th basin bulkhead was rebuilt, and two foot-boards placed on the middle lock gates. A granolithic sidewalk was built in place of the old wooden one on the west side of the approaches to the swing bridge, and on the south side the roadway was widened out so as to bring the fencing into its proper line on the street.

SMITH'S FALLS DETACHED LOCK STATION.

Sundry small repairs were made to the station and swing bridge.

POONAMALIE LOCK STATION.

One pair of lock gates were renewed. One pair of draw bars placed on the upper gates, and four new chain blocks framed and put in place; and small repairs to station generally. The upper wing walls of the lock appear to be heaving outwards, and next winter when the water is out of the cut, they will be examined, and if necessary rebuilt.

BEVERIDGE'S BAY LOCK STATION.

Sundry small repairs made to station generally. The pier on the west side of the retaining dam, which was burnt last summer, was rebuilt and new guard posts put in the bents of the bulkhead.

PERTH BASIN.

Sundry small repairs were made to the wharfs and bridges, by the two bridge tenders. The wharf on the south side of the basin requires to be repaired, which will be done this summer; and some of the culverts on the tow path road will also be raised and repaired. Some tile drains were put in near the town to carry off the surface water from land that was flooded by the bank of the tow path.

OLIVER'S FERRY BRIDGE.

Sundry small repairs made to the turntable of the swing span and to the planking of main bridge.

THE 'NARROWS' LOCK STATION.

Sundry small repairs were made to the station in general, and the long dam was gravelled and the roadway raised.

NEWBORO' LOCK STATION.

The lower wing wall on the west side was taken down and rebuilt last winter by our own masons, who quarried and cut the stone during last summer in Elgin quarry. The lower gates were run into and slightly damaged last summer by a steam scow called the *Kenirving.* Fortunately the damage was confined to the foot-board of the gate and the sluice racks; the gate itself being uninjured. The owner of the boat made the damages good. Attempts were made this spring to cut away our reservoir dam at the outlet of Wolfe lake, which supplies the level above Newboro'. I therefore placed a special watchman to look after this dam until the freshet had subsided; the lockmaster at Newboro' being too far away from the dam to watch it at such a time, as closely as the occasion required. I may state that this dam is over 7 miles from Newboro' lock station.

CHAFFEY'S LOCK STATION.

Sundry small repairs were made to the station in general. The bridge across the waste water channel is getting old, and will be rebuilt this year. A new set of footboards and drawbars have been ordered, and will be placed on the upper lock gates this summer.

DAVIS'S LOCK STATION.

Sundry small repairs were made to the station in general. The lock labourers cottage and the storehouse require to be reshingled, and this will be done during the summer.

JONES'S FALLS LOCK STATION.

Sundry repairs were made to the station in general. Some settlements in the big dam were filled up; the face of the big stone dam is now being cleared of the ferns and moss which have accumulated between the joints of the dry stone facing. As this dam is over 60 feet high, the men have to be let down with slings. The freshet was passed through Morton dam without any material damage being done.

BRASS'S POINT BRIDGE.

The swing span of this bridge was rebuilt, and repairs made to the piers and hand-railings, by our own carpenters. Small repairs to the planking were made by the bridge tender. Next year the remainder of the bridge will have to be rebuilt.

BREWER'S UPPER MILLS LOCK STATION.

The violent freshet this spring made a breach in the retaining dam, which at one time threatened serious consequences. However, by working day and night the break was repaired, and the whole dam has been widened out and strengthened, so that it is now stronger than it ever was.

The wing walls of the upper lock were grouted, and small repairs made to the station in general.

BREWER'S LOWER MILLS LOCK STATION.

Some gravel was placed on the dam, and sundry small repairs made to the station in general.

KINGSTON MILLS LOCK STATION.

One pair of lock gates were renewed. Several sluice frames put in, and sundry repairs made to the masonry. A considerable quantity of grout was put into the walls; but the masonry at this station requires a large quantity of cement before it is thoroughly tight. This winter the stone weir will be rebuilt. A quantity of stone was placed on the stone dam, the roadway of which was getting low.

GENERAL.

The pointing and grouting of the lock masonry was done as usual by our lock men, the cement for which, as well as that for the special repairs was purchased from

Messrs. Bellhouse, Dillon & Co., of Montreal, under contract. The painting of the houses, bridges, lock gates, &c., was also done by the lock men ; the paint being supplied, under contract, by Mr. W. E. Dickson, of Montreal. The Douglas fir dimension timber for lock gates, bulkheads, &c., was supplied, under contract, by Mr. M. Ryan, of Smith's Falls, who carried out his contract most satisfactorily.

DREDGING PLANT.

The dredge *Rideau* was employed last season in completing the new channel below Kingston Mills locks. She has just about finished the same; the new channel being over three miles long. The dredge is in first-class order, having had additional frames placed under her hoisting engines last spring, when fitting out. She, however, requires a new boiler, for which provision has been made in the current estimates, and the boiler will be placed in position before next spring.

The tug *Shanly* is also in fair condition, but draws too much water for this canal. She was employed last season in attendance on the dredge, delivering stores along the canal, buoying out the channel, removing stumps, snags, &c., from the channel at various points, and also on inspection work.

The dump scows are now getting old ; but as they have not been used for some years, it is hardly worth while building new ones until dredging is required where scows are used, which will not be for sometime yet, as the work proposed to be done is all in cuts where our boom dredge can swing the material 25 feet clear of her mast each side.

I append hereto a table showing the highest and lowest water during each month of the year at Ottawa and Kingston Mills lock stations.

I have the honour to be, sir,
Your obedient servant,

ARTHUR T. PHILLIPS, M.C. Soc. C.E.
Superintending Engineer.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals.

RIDEAU CANAL.

Showing monthly the highest and lowest water, on the mitre sills of the locks at Ottawa and Kingston Mills, respectively, from July 1, 1900, to June 30, 1901.

Ottawa.						Kingston Mills.					
Highest.			Lowest.			Highest.			Lowest.		
	Ft.	In.		Ft.	In.		Ft.	In.		Ft.	In.
July 15	15	2	July 2	10	8	July 1 31	8	0	July 1-31	8	0
Aug. 1	13	8	Aug. 31	9	11	Aug. 1-5	8	0	Aug. 27-31	7	6
Sept. 23-25	9	10	Sept. 15	8	8	Sept. 1-5	7	6	Sept. 29 and 30	7	1
Oct. 17-20	11	4	Oct. 4-5	10	0	Oct. 1-11	7	0	Oct. 23-25	6	10
Nov. 25-27	12	0	Nov. 18	9	4	Nov. 1-11	6	11	Nov. 28-30	6	9
Dec. 1-2	11	2	Dec. 28-31	9	7	Dec. 1-16	6	11	Dec. 17-31	6	10
Jan. 1-3	9	6	Jan. 27-31	8	7	Jan. 1-10	6	10	Jan. 21-31	6	8
Feb. 1-5	8	6	Feb. 17-28	8	4	Feb. 1	6	8	Feb. 23 28	6	5
Mar. 24-31	8	5	Mar. 12-21	8	3	Mar. 29-31	7	0	Mar. 1-15	6	5
April 27-30	21	2	April 1	8	10	April 27-30	8	0	April 1	7	0
May 1	21	2	May 31	16	4	May 1	8	0	May 14-31	7	10
June 8	17	6	June 30	12	3	June 14-30	8	0	June 1-10	7	10

A. T. PHILLIPS,
Superintending Engineer.

RIDEAU CANAL OFFICE,
OTTAWA, July 4, 1901.

ST. LAWRENCE DISTRICT.

SUPERINTENDING ENGINEER'S OFFICE,
CORNWALL, July 1, 1901.

SIR,—I beg to submit my annual report upon work of construction, survey, &c., as connected with the enlargement of the St. Lawrence canals, for the year ending June 30, 1901.

CORNWALL CANAL.

(*Opened for traffic, 1843.*)

This canal was originally designed and constructed to allow vessels of not over nine feet draught to surmount the Long Sault Rapids, extending from Cornwall to Dickenson's Landing, a distance of 11½ miles, with a rise of 48 feet, originally made in six locks, but since reduced to five.

The canal is situated on the north side of the St. Lawrence river on ground sloping rapidly towards the river, and generally about 30 feet above it. The high embankments thus rendered necessary when not perfectly constructed, or when resting on treacherous foundations, which are common along this section of the river, have given rise to frequent landslides, accompanied by subsidence, entailing as in 1888, very serious consequences.

In order to make the St. Lawrence navigable by vessels of the same class that pass through the Welland canal, and to carry out the general scheme of enlargement adopted by the government, work was commenced on the Cornwall canal division in 1876.

This work consisted in deepening, widening and straightening the original channel, strengthening and protecting the embankments, and in building enlarged locks 270 feet long by 45 feet wide, with not less than 14 feet of water on the mitre silll, when the river is at its lowest stage, supply weirs, bridges, &c., also in addition to the above, and not included in the original contracts, the repair or renewal of the foundations and general restoration of the damaged masonry of the old locks 15, 16, 17, 18, 19 and 20, and the adaptation of the basin between old locks 16 and 17 to the purpose of a dry-dock. Also dams, weirs and guard gates, with the automatic dam at lock 20, rendered necessary by the adoption of the Sheik's Island channel, and the masonry superstructure with ice-breaker on the old pier at the upper entrance.

The Sheik's Island channel does away with the imperfectly constructed embankments west of Milleroches, embraced in contracts Nos. 6 and 7 and parts of 5 and 8, which were abandoned when the decision to construct the channel had been arrived at. This diversion from the line of the old canal does away with 3½ miles of very tortuous canal navigation, unfit for the class of vessels for which the enlarged canal system was intended and substitutes 2¾ miles of what can be classed as lake navigation, thus dividing the canal into two sections, the lower or eastern section 6 miles long, upper or western section 2¼ miles, with 2¾ miles of lake navigation between, and saving about half a mile in distance.

The guard gates and automatic dam at lock 20 were constructed to protect the lower reaches from the large body of water impounded by the construction of the Sheik's Island dams, in case of accident to the locks or other structures.

For the purpose of construction, the canal was divided into nine sections, commencing with No. 1 at the lower or eastern entrance. The work of enlargement was commenced on this section in 1876 and was finished in 1882, except some work on old lock 17 and the weir and headrace to the mills, which were afterwards completed under the contract for section No. 2.

The next section to be let was No. 10 to Messrs. Jocks, Delorimier & Broder, who commenced work in 1884, and with the exception of the upper entrance, completed it in 1895.

LIST OF CONTRACTORS.

Locality.	Section.	Contractors.	Date of Contract.
Cornwall	2	Wm. Davis & Sons	Nov. 5, 1888.
Lock No. 19	3	"	"
Maple Grove	4	"	"
Sheik's Island Dams		"	June 19, 1893.
Mille-roches	5	The Gilbert Blasting and Dredging Co.	Nov. 2, 1888.
Moulinette	6	" "	"
Sand Bridge	7	" "	"
Long Sault	8	" "	"
Dickenson's Landing	10	Jocks, Delorimier & Broder	April 7, 1884.
Upper Entrance		The Weddell Dredging Co	Sept. 28, 1899.

NOTE.—Section No. 8 adjoins Section No. 10.

The work to complete the upper entrance was let to Messrs. Weddell & McAuliffe under contract entered into on September 28, 1899, to be completed by November 13, 1900.

It consists in the extension, straightening and widening of the channel on the north or landward side of the present entrance, from deep water which commences 900 feet west of the upper gates of guard lock No. 21 and extends to a point about 1,100 feet west of the lighthouse on the south entrance pier, a distance of about 3,500 feet. The dredging operations mentioned in my last report were carried on until September 6, 1900, when the dredges were removed to Mariatown Point, Rapide Plat canal. At this time the excavation below water was nearly completed to the bottom angle of the north slope, and the entire channel from upper entrance of guard lock No. 21 westerly was cleaned up to afford the required 14 foot navigation at low water.

Excavation above water by means of steam shovel, was commenced on August 27, 1900, and carried on until January 5, 1901, and again resumed May 28, 1901, and is still in progress.

The fencing along the new canal limits was completed in July, 1900.

Protection of slopes and preparing the seat for the same was commenced on Aug-August 1, 1900. and continued until November 15, 1900, and again resumed on April 15, 1901, and is still in progress.

The old locks have been kept in a state of repair so that they could be used in case of accident to the new ones, by vessels of 9 feet draught, as hitherto employed on the St. Lawrence, also for the purpose of admitting vessels for repair to the drydock formed in the basin between locks 16 and 17.

In connection with the additional water-power recently granted at lock 18 to the Paper Mill Company, attention is directed to the necessity for enlarging the regulating weir at old lock 17, and for protecting the north bank of the canal east of Pitt street.

Electric power, in connection with the operation and lighting of the canal, contracts were entered into June 25, 1896, and October 19, 1900, with Mr. M. P. Davis, and work commenced on the power-house at lower dam, Sheik's island, during the latter month, the cedar poles were provided during the winter and distributed after the opening of navigation, the work of setting them in place and wiring is now being proceeded with.

The cables for crossing at, and operating the locks and bridges, were placed in position whilst the canal was unwatered in April.

It is expected to have the lighting installed in time for the fall trade and the operating machinery at the locks ready for the opening of navigation in 1902.

FARRAN'S POINT CANAL.

(*Opened for traffic, 1847.*)

This canal is situated about five miles west of the village of Dickenson's landing, the head of the Cornwall canal. It was built to overcome a short, swift rapid above the village of Farran's Point, and was about ¾ mile long, with a lockage of 3½ feet.

In the year 1847 the original canal, for 9 feet navigation was opened for traffic. The present enlarged canal has been extended to Empey's bay, thus increasing the length to 1¼ miles and the lockage to 4 feet.

The enlargement having been authorized, tenders were advertised for, and on June 1, 1897 a contract was entered into with the Canadian Construction Company to undertake the necessary work and to have it completed by January 31, 1899.

The time for completion has since been extended.

The works undertaken in connection with the enlargement consisted of, forming a new eastern or lower entrance, north of the original and free from the eddies produced by the above rapids.

The building of a 'flotilla lock' 800 feet long and 50 feet wide, with 14 feet of water on sill at the lowest known stage of the river, and extending from deep water at its eastern entrance to a point about 200 feet west of the old lock, and nearly parallel to it on the north side, also of the deepening and straightening the old channel to the head of the old canal and its extension through Point Avoyon to Empey's bay, also the building of a road to replace a portion of the Queen's old highway occupied by the enlargement. It is intended to keep the old lock in repair so that it can be used in case of accident to the new lock.

The new lock was ready for traffic September 6, 1899, and has since been used by all deep draught vessels.

The work done during the past fiscal year was as follows :—

At the lower or eastern entrance, filling in and forming bank in rear of north pier was completed, two additional cribs were placed at east end of north pier, masonry superstructure on north and south piers completed, repairs to old government wharf in progress.

At the upper or western entrance, masonry superstructure on north pier completed in July, 1900

The work of putting stone protection on banks is nearing completion.

The necessary repairs to the masonry of the old lock was completed in November, 1900.

The work of protecting the banks by sodding is nearly finished.

The dredging operations in deepening the south side of the channel at the western curve have been carried on during the present season and are nearing completion.

It is expected that the whole of the works on this canal will be completed this season.

WILLIAMSBURGH CANALS.

RAPIDE PLAT CANAL.

(Opened for traffic, 1847.)

The lower entrance of the Rapide Plat or Morrisburg canal is situated about 9½ miles west of the Farran's Point canal. It was designed to overcome the rapids of 'Rapide Plat' by lock of 11½ feet lift, and extends from the village of Morrisburg to Flagg's bay, a distance of 3¾ miles.

The original canal intended for vessels of 9 feet draught was opened for traffic in 1847.

The works of enlarging for the 14 feet draught vessels was commenced in 1884, and consisted in the deepening and widening of the old channel, the building of a new lift and a guard lock of 270 feet by 45 feet, supply weirs, and regulating weirs, &c., and the construction of a new road to replace the highway destroyed by the canal improvements.

The old lift lock was put in thorough repair, and the sill lowered so as to admit of 9 feet navigation through it at lowest water.

LIST OF CONTRACTORS.

Locality.	Section.	Contractors	Date of Contract.
Morrisburg	1	Poupore & Fraser	January 26, 1891.
Mariatown	2	Weddell Dredging Co.	" 12, 1891.
New Road	3	Poupore & Fraser	" 26, 1891.
Flagg's Bay	4	William Broder	April 2, 1884.
Upper Entrance		P. H. Gilbert	" 17, 1891.

The work on all sections except at Mariatown and upper entrance has been completed, and the final estimates forwarded to the department for approval.

The work of widening and straightening at Mariatown point, commenced but afterwards discontinued, was again resumed by the Weddell Dredging Company under their contract for section No. 2, in August, 1900, and completed in June, 1901.

Upper Entrance.—This work consists in the straightening, deepening and widening of the channel, the removal of the old north and south piers and the construction of a new and more extensive pier with stone superstructure and ice-breaker on the south side.

The contract for this work was warded to Mr. P. H. Gilbert and was commenced on April 17, 1901.

Up to June 30, 125 lineal feet of cribwork was built and placed in position and 50 lineal feet built ready to be placed.

GALOPS CANAL.

(Opened for traffic, 1847.)

Between the head of the Rapide Plat canal and the foot of the Galops, at the village or Iroquois, there is a 4½ mile stretch of river navigation. What is now known the the Galops canal was originally built as two separate canals, with a short stretch of river navigation between.

These were opened for 9-feet navigation in 1847. The lower or easterly section, called the Point Iroquois canal, commenced at the village of Iroquois and extended to Presqu'ile. It was 3 miles long and had a lockage of 5 feet 7 inches, which overcame the rapid of Pointe aux Iroquois.

The upper or westerly section commenced at the village of Cardinal and extended up a stream 2 miles to the head of the Galops rapids ; it had a lockage of 6 feet 8 inches, and surmounted the Cardinal and Galops rapids. This was known as the Galops canal.

About ten years after the completion of these canals, they were connected by an embankment, otherwise the 'Junction canal,' built in the river, and other improvements made increasing the total length of canal to 7½ miles and the lockage to 14 feet 10 inches, thus avoiding the rapid current of the short stretch of river navigation.

In 1888 Messrs. Murray & Cleveland entered into a contract with the government to enlarge the upper entrance ; the work consisting of the building of a new lift lock, connecting directly with the river immediately below the Galops rapids, and a new guard lock, both 270 feet long by 45 feet wide, and a supply weir. The removal of the old guard lock, and also the deepening, widening and straightening of the channel from the upper entrance past McLaughlin's Point to the new locks at Round bay, a distance of about one mile.

The improvement of the channel at McLaughlin's Point by widening it towards the north, as authorized, was commenced with steam shovel from Drummond's Island last September ; it is progressing slowly but satisfactorily.

The excavation under water consists of hard pan and boulders, and it will become necessary to resort to blasting the earth in advance of the steam shovel.

It is also proposed to build a toll-house for the collector at locks 27 and 28.

It is proposed to extend the south-east pier below lock 28, a distance of 250 feet, to render the entrance safe for downward bound vessels with tows.

In the year 1897, the government advertised for tenders for the enlargement of the other portions of the canal, dividing it into two sections or contracts of about 3 miles each, Iroquois and Cardinal. Messrs. Larkin & Sangster obtained the first named and Messrs. Wm. Davis & Sons the latter. In each case the work was to be completed by January 31, 1899.

The time for completion has since been extended.

The cheme of enlargement contemplated the raising of the level of the reach between Iroquois and Cardinal six feet, that is to the height of the lowest known level of the river at the head of the Galops rapid, and overcoming the whole rise with one lift lock at Iroquois.

The lift lock at Cardinal will be cut off from the canal and connected directly with the river and used only to accommodate the village of Cardinal and the coasting trade.

IROQUOIS SECTION.

Work on the enlargement of this section was commenced in May, 1897. It consisted of excavating a new entrance channel, the building of two entrance piers, 'Flotilla lock,' 800 feet long by 50 feet wide, wiers, bridges, retaining walls, &c., and the straightening, deepening and widening of the canal for about 3 miles, also the reconstruction of the highway north of the old canal, &c.

During the past fiscal year all the masonry in connection with retaining walls, culverts, fencing, &c., &c., was completed ; the excavation at the entrance is practically finished, although a small quantity of rock has yet to be removed from the north side of the channel.

The extension of the north-east pier for a distance of 150 feet was completed.

The prism of the canal is down to grade with the exception of a portion of the old canal bank, which has yet to be removed.

The stone protection of slopes is practically complete except at points where the banks require strengthening, the sodding and soiling of banks is also completed, except where repairs due to contractors dredging operations are rendered necessary.

During the early part of the season this section was brought into use for 14 feet navigation. Between 16th May and 23rd June the following steamers drawing over 13 feet were locked through, viz. : S.S. *Theano, Michigan, Parthia, Monkshaven, Paliki, Bothnia* and *Paraguay.*

Besides the above several minor details were attended to, such as painting gates and bridges, placing iron railing and fencing, iron ladders in sluiceways, iron gratings over sluice tubes, &c.

The work now remaining to be done on this section consists in completing the masonry foundation walls for the Iroquois water works, the renewal and repair of the old government wharf at the village of Iroquois, and the widening and deepening of the government ditch on the north side of the canal.

CARDINAL SECTION.

Commencing at the western end of the Iroquois section at Presqu'ile it extends west through the rear of the village of Cardinal to Gate's point, the eastern end of the upper entrance contract, a distance of about three miles.

The work consists in the widening, deepening and straightening of the old canal at each end of the section and construction of an entirely new piece of canal, through and on either side of the village of Cardinal, requiring the excavation of the prism, the building of banks and their protection, and the construction of crib-work and masonry revetments through the 'deep cut,' also the building of bridge piers and abutments, &c.

The chief feature is the 'deep cut' in rear of the village of Cardinal, 5,900 feet long and 68 feet deep at the highest point, requiring the excavation of about 2,000,000 cubic yards of material.

The excavation for the 'deep cut' is now about completed, there only remains to be done the trimming of the upper slopes to receive the pitched stone facing, and sodding, and the cleaning up of the lower slopes at the east and west ends, with dredge, all of which work is now in progress.

Earth Excavation.—The total quantity of excavation on this section was originally about 2,600,000 cubic yards, of which there still remains to be excavated about 150,000 cubic yards, principally at Fraser's point, east of the 'deep cut' where one dredge is now at work, and at Gate's point where one shovel is at work.

Rock Excavation.—The total quantity of rock excavation on this section has proved to be about 18,000 cubic yards, of which about 10,000 cubic yards was contained in the 'rock in situ' found in the bottom of the 'deep cut.' The only rock now remaining to be excavated will be the boulders which may be encountered during the dredging operations at Fraser's point.

Crib-work.—The crib-work revetment through a portion of the 'deep cut' is completed, except about 350 lineal feet at west end, which will be put in place after the removal of the dam across the canal.

The total length of this crib-work will be about 5,400 lineal feet, and will contain about 300,000 cubic feet of timber, 275,000 pounds of iron in bolts and 42,000 cubic yards of stone filling.

The masonry revetment walls built on top of this crib-work are now completed as far as the crib-work extends and filled behind with stone ; these walls contain about 9,000 cubic yards of masonry.

Embankment.—At east end of section about 5,800 lineal feet of the south bank is protected with stone facing, and also about 1,200 lineal feet of the south bank across Gate's bay. All embankments are now made to their required height and width, except that portion forming dam across old canal at east end of 'deep cut.'

The work of protecting the slopes of the 'deep cut' by pitched stone facing, resting on quarry waste, was commenced in September, 1900, and has been carried on continuously, except during the winter. Five building derricks are employed, building altogether about 3,000 cubic yards per month. There still remains to be done about 30,000 cubic yards.

A dam was thrown across the old canal at east end of the 'deep cut' to provide for the raising of the water in the lower level. On May 6 lower level was gradually filled, when a few leaks were found in the banks of the Iroquois section which necessitated the lowering of the water, after proper repairs were made the water was again raised on May 23, and several of the larger class of vessels, such as the *Monkshaver*, &c., passed through without any difficulty.

The cutting of an opening through the old canal bank below lock No. 26 in order to carry away the water used by the Edwardsburg Starch Company's mills will be proceeded with at an early date.

GALOPS RAPID IMPROVEMENT.

This work comprises the excavation of a straight channel 200 feet wide and 17 feet deep through the shoals of the rapid, which are known by the following names, viz. :—Upper bar, North and Caledonia shoals, Island shoal and Lower bar. The whole of these shallow places are included in a distance of 3,300 feet.

The work is subaqueous and consists in blasting and dredging the rock in the rapid.

The work as originally designed for the 200 foot channel was finished in November, 1888, but in view of the apparent permanent lowering of the water surface of the River St. Lawrence, and for the purpose of making a satisfactory test and survey of its bottom, and at the same time to be prepared for the removal of any material above the original contract grade, an agreement was entered into in the year 1897 with the Gilbert Brothers Engineering Company, Limited, to perform the necessary work. Operations were commenced the same year. In the year 1898 it was decided to widen the entrance to the existing channel south or towards Adam's Island, with a view to eventually increase the width of the channel as originally excavated to 300 feet.

The plant employed consists of a dredge, drill scow, tugs, scows, &c., all adapted to the special work in hand.

During the past fiscal year the widening and deepening of the channel on south side of Upper bar by dredging was completed in October, 1900.

The total quantity of excavation for Upper bar was 10,300 cubic yards, including a berme on the south side of the cut ; and the final soundings show the completed bottom to be below grade over the whole area covered by the dredging operations.

Excavation on north point of Island shoal for the additional width was commenced in October and continued until the end of November, when work was stopped for the season.

During the first part of the season of 1901 the dredge was engaged on Toussaint's Island shoal ; on June 14, after the accident to the *Northwestern*, she was removed to North shoal and recommenced the work of widening and deepening the channel.

The drill scow was engaged in drilling and blasting on the north point of Island shoal, from July 1, to August 4, 1900, and was subsequently engaged on the 200 foot channel and on the North shoal when work was closed down for the season.

Operations on North and Island shoals were resumed in May and June, 1901, will be continued until the close of the season.

The appropriation for the Galops rapid lapsed on June 30, 1901, of which due notice was given to the contractors.

NORTH CHANNEL.

This channel commences about one mile west of the upper entrance to the Galops canal and extends in a straight line to deep water off Chimney Point, a distance of 2½ miles.

It was constructed to avoid the sinuous natural channel passing through American waters, which is about three-quarters of a mile longer and could not be navigated with safety by the class of vessels for which the present enlarged canals were designed.

The work consists in the excavation of a channel originally 200 feet wide, which was subsequently increased to 300 feet, through the bed of the St. Lawrence river, and Drummond and Spencer islands, the construction of embankments on either side of the channel and of piers of cribs at its eastern and western entrances.

The work having been authorized and tenders advertised for, it was let to Mr. M. A. Cleveland, May 14, 1897, the work to be finished on January 31, 1899.

The time has since been extended.

At Drummond's island dredging was continued until December, the steam shovel also working until September, when it was removed to the upper entrance.

A channel 300 feet wide and of a minimum depth of 16 feet is completed through the shoal above upper entrance of the Galops canal.

The excavation by dredging of both eastern and western entrances has been completed to a width of 200 feet.

Drilling and blasting operations have been carried on without interruption during the working season, from July 1, 1900, to June 30, 1901, in prism below east dam.

About 6,500 lineal feet of protection walls above water line and backing to curbing has been completed.

During the year 53 cribs, 30 x 20 feet, were sunk, closing the gap between guide crib and cribwork from head of Spencer's island.

Pier at south side of eastern entrance has been completed and protected by stone talus.

Timber for cribs required in connection with the proposed dam across the 'Gut' between Adam's and Ogden's islands has been delivered.

The question of the dam calls for a decision, as the rock from the excavation at North channel and upper entrance is intended to be utilized in its construction.

All classes of vessels have now adopted the North channel, and it has practically become the main channel of the St. Lawrence, between Prescott and the Galops, owing to its accessibility, depth of water, and saving in distance.

RIVER REACHES.

Improvement of Channel—Lake St. Francis.

From head of Soulanges canal to foot of the Cornwall canal, the length of the navigable channel is about 32¾ miles, of this distance 30 miles is through Lake St. Francis.

A channel has been located between the above mentioned points, with a minimum depth of 16 feet at lowest water.

St. Regis Section, Two and a Half Miles East of Cornwall.

It is situated about midway between the foot of Cornwall island and First Crab island. The work here consists in the dredging of a channel 1,100 feet long and 300 feet wide through what is known as the St. Regis shoals, and protecting it with a dyke terminating with crib piers. This work was let to Messrs. Manning & Macdonald, May 24, 1898, to be completed November 30, 1898.

The time has since been extended.

This work was completed before the close of navigation in 1900, and (as in the case of the 'north channel') is now considered the principal deep water channel.

Hamilton Island Section.

Between the seventh and eleventh mile east of the foot of the Cornwall canal.

The work consists in the dredging of a channel through, or of the removal of the following shoals :—

The Middle Ground..................	10 miles east of Cornwall.
The Highlander shoal.............	10½ "
The Horseback....................	11 "

A contract was entered into with Messrs. Manning & Macdonald, May 24, 1898, to be completed November 30, 1898.

The time for completion has since been extended.

The work on the Middle Ground, 700 feet long, was completed during the past fiscal year.

On Highlander shoal, 600 feet long, the work proving too difficult for the class of dredge employed there, the contractors decided to wait until they could bring their more powerful machine from St. Regis shoal.

This has since been done and the shoal has now 16 feet over it at lowest water.

Work has been commenced at Clark's island and will be completed this season.

ST LAWRENCE RIVER AND CANALS.

During the past fiscal year all the reaches of the River St. Lawrence between Coteau Landing and Prescott have again been thoroughly examined and swept.

The inauguration of the system of gas buoys to define the deep water channel for 14 foot navigation was begun in October, 1900, when the buoy tender *Scout,* which was being adapted to the buoy service was first rendered available.

Although but half finished as regards machinery and interior fittings, she nevertheless succeeded in placing all the important buoys for the fall trade, and afterwards in removing them to winter quarters at Morrisburg, and replacing them before the opening of navigation in 1901.

The fact of the existence of a 14 foot navigation has been sufficiently demonstrated. No accident having occurred to vessels of 13 or 14 feet draught beyond what was clearly due to the incapacity of the pilot, or to defects in the steering gear, as in the case of the *Northwestern* and the *Leafields.*

I have the honour to be, sir,
Your obedient servant,

TOM S. RUBIDGE,
Superintending Engineer.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Railways and Canals, Ottawa, Ont.

ST. LAWRENCE DISTRICT.

SUPERINTENDING ENGINEER'S OFFICE,
CORNWALL, July 1, 1901.

SIR,—I have the honour to report on the maintenance of the canals under my charge during the fiscal year ending June 30, 1901.

The St. Lawrence district includes the Cornwall, Farran's Point, Rapide Plat, Galops, North Channel and Murray canals, the improvement of the rapids and channels of the navigable reaches of the River St. Lawrence and Lake St. Francis.

CORNWALL CANAL.

Navigation for the season of 1900 closed on December 8, 1900.

The canal was unwatered for repairs on March 28, 1901, and so continued until May 1, when it was open for traffic.

The locks at lower entrance were dismantled and secured for winter.

The dry-dock was used to its full capacity during the winter.

The usual work was carried on at the workshops in preparation for spring repairs.

Navigation was maintained without interruption.

Extensive repairs and renewals to the south-east wing wall of the weir at lock 19, and also to the channel below it, were made, whilst the canal was unwatered.

An addition to the house of the lockmaster at lower entrance was constructed by order of the newly appointed overseer.

The overseer's house and premises were papered, painted and generally overhauled by order of the overseer.

No accidents have occurred.

Fines will be dealt with by the superintendent.

A new regulating and supply weir at the headrace to the lower mills, old lock 17, and extensive repairs to north bank are necessary.

The highest water recorded during the season of navigation at lock 15, lower entrance, was 10 feet 9 inches, and the lowest 8 feet 10 inches.

The highest water recorded during the season of navigation at lock 21, upper entrance, was 10 feet 3 inches, and the lowest 7 feet 9 inches.

The highest and lowest water during the year ending June 30, 1901, at locks Nos. 15 and 21, is as under :—

Lock 15, highest—21 ft. 6 in., January 21, 1901.
" 15, lowest—8 ft. 9 in., December 29, 1900.
" 21, highest—10 ft. 3 in., May 13, 1901.
" 21, lowest—7 ft. 9 in., November 26, 1900.

The above levels are with reference to the mitre still of old locks 15 and 21

WILLIAMSBURG CANALS.

The several divisions of these canals, viz. :—Farran's Point canal, Rapide Plat canal, and the Point Iroquois, the Junction and the old Galops canal, collectively known as the 'Galops canal,' were closed on December 11, 1900, and re-opened for the season of 1901 on May 1, but the actual date on which the several locks were opened was varied to suit the requirements of the contractors for the enlargement.

Navigation was maintained in a fairly satisfactory manner during the past year, in view of the extensive works of enlargement now in progress.

No accidents have occurred during the year.

Fines, if any, dealt with by the superintendent.

The new lock at Farran's Point was opened for traffic on August 13, 1900.

The upper gates of old lock No. 22 were replaced by new ones shortly after the opening of navigation ; this structure has now been put into perfect repair, and can be used in case of accident to new lock.

The old buoy boat was rebuilt during the winter.

The buoy service was performed by the buoy tender *Scout*.

The usual repairs were made at all locks, to operating gear, snubbing posts, &c.

The old government wharf at Morrisburg was rebuilt, extra men being employed to assist the repairs staff.

The storehouse at Morrisburg was repaired and removed to Stata's bay.

Spar buoys were prepared and ironed during the winter.

The lockmaster's house at lock 23, Morrisburg, was pulled down to make way for the new electric light power house.

The lowest water on the mitre sill of old lock 23, formerly the governing point on the canals in this district, during the season of navigation, was 5 feet 2 inches on November 26, 1900.

The lowest water on the mitre sill of old guard lock No. 27, during navigation, was 6 feet 7 inches on November 26, 1900, and the highest, 10 feet 4 inches, on June 8, 1901.

MURRAY CANAL.

Navigation closed on December 6, 1900, and opened again on April 16, 1901.

Eight hundred and twelve vessels passed through the canal from July 1, 1900, to June 30, 1901.

No accidents occurred during the year.

The towpath ditches and back ditches were cleaned out. Weeds and brush were cut.

Floors of all bridges repaired where required.

The riprap was repaired for a distance of 1,150 yards, and 1,115 cubic yards of broken stone used.

All culverts are in good repair and one new one has been built.

The highest water recorded during the season of navigation, 1900-1901, was 13 feet 6 inches on June 13, 1901, and the lowest, 11 feet 3 inches, on November 14, 1900.

I append a statement showing the highest and lowest water during the past year on each of the canals in my district, also a condensed statement of the highest and lowest water during the season of navigation, from the year 1891 to 1900, both inclusive.

I have the honour to be, sir,
Your obedient servant,

TOM. S. RUBIDGE,
Superintending Engineer.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Railways and Canals, Ottawa, Ont.

STATEMENT of the Highest and Lowest Water on the Canals in the St. Lawrence District, for the year ended June 30, 1901.

MONTH.	CORNWALL CANAL,						WILLIAMSBURG CANALS.						LAKE ONTARIO.			
	Lock 15.		Lock 21.		Lock 22.		Lock 23.		Lock 24.		Lock 25.		Lock 27.		Murray Canal.	
	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.
	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.
1900.																
July	10 0	9 9	10 2	9 7	9 4	8 10	9 1	8 5	9 5	8 5	11 10	11 1	10 0	9 3	13 0	12 7
August	10 0	9 7	9 10	9 2	9 1	8 6	8 9	7 10	8 9	8 0	11 5	10 0	9 7	8 9	12 10	12 7
September	9 8	9 3	10 2	8 11	8 9	8 2	9 0	7 6	9 5	7 5	12 1	10 0	10 3	8 6	12 7	12 2
October	9 7	8 10	9 3	8 5	8 6	7 9	7 10	6 6	8 0	6 1	10 7	8 3	9 0	8 1	12 3	11 10
November	10 2	8 10	10 2	7 9	10 4	6 5	8 0	5 2	7 8	5 3	10 7	7 8	8 8	6 7	12 0	11 3
December	9 10	8 9	10 0	8 4	10 5	7 9	8 5	7 1	8 5	7 2	10 9	9 3	9 6	8 2	12 9	11 0
1901.																
January	21 6	8 11	9 9	8 0	9 6	8 0	8 11	5 11	8 5	6 2	10 8	6 0	9 2	8 1	12 0	11 9
February	19 3	16 9	10 0	8 9	10 5	8 0	8 9	6 8	7 5	6 3	10 0	8 3	8 3	7 2	11 10	11 6
March	18 9	15 2	9 7	8 6	9 3	8 4	7 9	6 0	7 8	6 1	10 0	7 6	8 5	7 4	11 11	11 4
April	15 0	10 1	9 11	8 9	9 2	8 3	8 11	7 3	9 0	7 2	11 9	9 10	9 6	8 4	13 1	11 11
May	10 4	10 0	10 3	9 5	9 7	8 3	9 5	7 10	9 8	7 5	12 3	10 6	10 2	8 9	13 1	13 0
June	10 5	10 0	10 3	9 9	9 4	8 8	9 4	8 0	9 8	8 0	12 3	10 6	10 4	8 9	13 6	13 1

Statement of the Highest and Lowest Water on the Canals in the St. Lawrence District, May to November in each yeor.

Year.	Cornwall Canal.												Williamsburg Canals.											
	Lock No. 15.						Lock No. 21.						Lock No. 22.						Lock No. 23.					
	Highest.			Lowest.			Highest.			Lowest.			Highest.			Lowest.			Highest.			Lowest.		
	Month.	Ft.	in.	Month.	Ft.	in.	Month.	Ft.	in.	Month.	Ft.	in.	Month.	Ft.	in.	Month.	Ft.	in.	Month.	Ft.	in.	Month.	Ft.	in.
1891	May	11	10	Nov	8	9½	May	11	11	Nov	8	2	May	10	11	Nov	7	6	May	11	1	Nov	7	0
1892	August	12	1	May	9	4	August	10	10	"	8	10	July	10	3	"	7	10	July	9	9	May	7	6
1893	May	12	5	Nov	9	7	May	11	9	"	9	0	May	11	2	"	8	3	May	11	1	Nov	7	1
1894	June	11	0	"	9	2	June	10	11	"	8	6	June	10	6	"	7	10	June	10	1	"	7	0
1895	May	9	10	"	8	0	May	9	4	"	7	4	May	8	9	"	5	10	"	8	0	"	4	10
1896	"	10	2½	Oct	8	6½	"	9	11	"	7	8	"	9	4	"	6	11	"	8	11	"	5	9
1897	August	10	3	Nov	8	5	"	10	0	"	7	5	"	9	10	"	7	2	"	8	11	"	4	9
1898	May	10	4	"	8	9	June	10	2	Oct	6	1	"	9	7	"	6	11	"	9	3	"	6	0
1899	"	10	7	"	8	8	May	10	4	"	7	11	"	9	6	"	7	0	May	9	4	Oct	6	4
1900	June	10	9	"	8	10	"	10	3	Nov	7	9	Nov	10	4	"	5	2	June	9	6	Nov	5	2

Statement of the Highest and Lowest Water on the Canals in the St. Lawrence District, May to November in each year—*Continued.*

Year.	Williamsburg Canals—*Continued.*												Lake Ontario.											
	Lock No. 24.						Lock No. 25.						Lock No. 27.						Murray Canal.					
	Highest.			Lowest.			Highest.			Lowest.			Highest.			Lowest.			Highest.			Lowest.		
	Month.	Ft.	In.	Month.	Ft.	In.	Month.	Ft.	In.	Month.	Ft.	In.	Month.	Ft.	In.	Month.	Ft.	In.	Month.	Ft.	In.	Month.	Ft.	In.
1891	May	12	0	Nov	6	9	May	13	11	Nov	9	0	May	12	0	Nov	8	0	May	14	9	Nov	11	5½
1892	Sept	10	0	"	7	0	July	12	8	"	9	4	July	10	3	"	8	3	July	13	6	"	12	1
1893	May	11	2	Aug	7	4	May	13	10	"	10	0	May	11	6	"	8	2	June	14	9	"	12	2
1894	June	10	5	Nov	6	9	July	13	3	"	9	1	July	10	9	"	9	1	"	14	0	"	12	2
1895	May	8	3	"	4	5	May	10	10	"	6	8	May	9	10	"	6	9	May	12	5	"	12	4
1896	"	9	3	"	5	7	"	12	0	"	8	3	"	10	6	"	7	6	"	12	10	"	11	1
1897	July	9	3	"	4	8	June	11	8	"	6	6	June	10	0	"	6	8	July	13	5	"	11	2
1898	June	9	6	"	6	0	"	12	0	"	8	0	"	10	0	"	7	2	June	13	6	"	11	0
1899	May	9	9	"	6	4	May	12	3	Oct	8	5	May	10	4	Oct	7	7	"	13	5	"	11	6
1900	"	9	5	"	5	3	June	12	3	Nov	7	8	June	10	5	Nov	6	7	"	13	3	"	11	3

WELLAND CANAL.

ST. CATHARINES, ONT., July 1, 1901.

SIR,—I have the honour to report upon the operation and maintenance of the Welland canal and its branches for the fiscal year ending June 30, 1901.

I was appointed Superintending Engineer on December 1, 1900, upon the resignation of Mr. W. G. Thompson.

The operation of the canal was interrupted twice during the season of navigation by accidents to the locks. The steamer *Waccamaw* bound down on October 10, 1900, ran into the lower gates of lock No. 6, breaking the upper 14 feet of them very badly, but did not carry them away ; this caused a delay to navigation of about sixty hours.

On May 1, 1901, the small steam barge *Van Allen*, bound down, ran into the lower gates of lock No. 6, carrying them away, and the rush of water breaking the fastenings on the upper gates, carried them away also. Four spare gates were stepped in forty-eight hours and navigation resumed.

The level of Lake Ontario has kept well up throughout the year, and there has not been less than 14 feet on the mitre sill of the lock at Port Dalhousie. Lake Erie, however, has been very low, being below the 14 foot mark at Port Colborne several times in the fall of 1900, and in the months of April, May and June, 1901, it remained almost continuously below that mark, causing a great deal of trouble to vessels navigating the canal.

It is proposed to lower the sills of the entrance lock at Port Colborne next winter so that there will be at least 14 feet on them at all stages of the lake level. It is also proposed to deepen the rock cut from Port Colborne to Humberstone, and tenders have been invited for this work. This portion of the canal has caused a great deal of trouble and delay to vessels during periods of low water.

The following employees have been superannuated during the year :—

Barnett Darby	Robert Brady
Nelson Higgins	Aaron Higgins

John Henshaw, lockmoster at Port Colborne, who was on the superannuation list, died on March 3, 1901, aged 70 years.

The following superannuated employees died during the year :—

R. D. Dunn, died August 28, 1900, age 78.
J. B. Smith, died February 19, 1901, age 77.

The Dominion police force established on the canal last year has been continued.

Last year the Grand Trunk Railway Company built the substructure for a new double track bridge to cross the canal below lock No. 17, but no further work has been done since.

The usual minor repairs to locks, weirs, bridges, &c., have been made, and in addition a great deal of heavy repair work was done this spring out of the 'repairs' appropriation. The lock at Port Robinson was unwatered and the foundation thoroughly repaired, large cavities under the mitre sills being filled up with concrete and the lower mitre sill and planking renewed. A cut-off was arranged at the lower end of the lock for future use in unwatering to save the expensive dam found necessary this time.

The east retaining wall below the weir at new lock No. 25, which is falling into the raceway was torn down and partly rebuilt in concrete.

While the water was out of the old canal in the spring from April 8 to 20, extensive repairs were made to supply weirs Nos. 13 and 15, which were badly undermined, and the side wall of No. 24 weir was taken down and rebuilt. The old locks were also overhauled as far as possible in the time and the mitre sills repaired.

A sand pumping plant fitted out in the spring has performed valuable service in cleaning out the old and new locks of several years deposit of silt, gravel, &c., which impeded the working of the gates.

A new and powerful gate lifting-pontoon was built during the winter.

All the heavy working gates on the new canal are now being lifted out and fitted with new steps where required, and such other means taken as are necessary to put them in proper working order.

It is proposed to place a simpler valve in the lock gates as the ones now in use are not at all satisfactory.

The old floating tow-path on the old canal between locks 1 and 2 is being torn up and the timber used to make floating fenders for portions of the long level.

The canal was closed December 15, 1900, and opened for navigation April 24, 1901.

CAPITAL ACCOUNT.

The bridge across the canal on the line of the 4th concession of Humberstone was completed last spring and brought into use, and the ferry at this point discontinued.

INCOME ACCOUNT.

Mr. John Riley, under contract, continued the work of placing a concrete superstructure on the west pier at Port Dalhousie, and Messrs. J. and T. Riley have entered into contract and commenced work at renewing the superstructure of the east docking with concrete.

The dry wall on the canal side of the high bank at the head of lock No. 24 on the new canal was found to be an insufficient protection, and dangerous leaks have developed at various times. To guard against this a contract was entered into with Mr. Joseph Battle, of Thorold, to build a concrete facing to the wall four feet thick at the bottom and eighteen inches at the top. This work was done in the spring of 1901, the water being let out of the canal for that purpose, and has proved eminently satisfactory. Another part of this contract, namely, the rebuilding part of the wall south of the high bank, which was falling down, was not quite completed owing to bad weather, and will have to stand over for another year.

The pile fenders of several bridges have been renewed.

The outlet into the canal for the surface drainage of Port Colborne has never been sufficient to properly fulfil its duties, and to remedy this, a new outlet has been made, and to further facilitate the flow of water and also to prevent the possibility of any sewerage getting into the canal a 24-inch tile pile has been laid along King street and connected with the outlets. There are no openings in this pipe, except the surface catch basins, so that it will be impossible for any sewerage to enter and contaminate the water of the canal.

Attached is a statement of fines collected for breaches of canal rules and regulations. Also a statement of damages to canal property and amounts collected for the same and to whom paid. Also a statement of the highest and lowest recorded depths of water on the mitre sills of the locks at Port Dalhousie and Port Colborne for each month in the year.

I have the honour to be, sir, your obedient servant,

J. L. WELLER,
Superintending Engineer.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals.
Ottawa.

WELLAND CANAL.

Statement of fines collected from Lock Tenders for dereliction of duties for the fiscal year ending June 30, 1901.

Date of Fine.	Name of Locktender.	Amount of Fine.		Date Paid.	Where Paid.
		Paid.	Unpaid.		Collector's Office.
1900.		$ cts.	$ cts.	1900.	
May 19	J. P. Pegg	5 00		July 27	St. Catharines.
" 19	Robt. Gibson	5 00		" 27	"
" 19	T. Commarford	5 00		" 27	"
" 19	John McLeod	5 00		" 27	"
June 18	Henry Hare	10 00		" 27	"
Aug. 27	Mich. Coady	5 00		Sept 14	"

WELLAND CANAL.

Statement of damages to Welland Canal property during the fiscal year ending June 30, 1901, and the amount paid and unpaid on account of said damages.

Date of Damage.	Name of Vessel.	Amount of Damages.		Date Paid.	Where Paid.
		Paid.	Unpaid.		Collector's Office.
1900.		$ cts.	$ cts.	1900.	
Ooc. 11	Steamer Waccamaw	1,235 25		Oct. 12	Deposited $4,000, St. Catharines.
				1901.	
Dec. 10	" Strat cona	18 51		April 29	Port Dalhousie.
1901.					
May 1	" D. R. Van Allen			May 4	Deposited $4,000, Port Dalhousie.
" 15	" New York	5 00		" 15	Port Colborne.
" 22	" A. D. Thompson			" 22	Deposited $150, Port Dalhousie.
June 1	" Strathcona	12 53		June 20	Port Dalhousie.

WELLAND CANAL.

STATEMENT showing the Highest and Lowest Depth of Water on the lowest mitre sill of Lock No. 1, new Welland Canal, Port Dalhousie, for the fiscal year ending June 30, 1901.

Months.	Lower Sill.				Months.	Lower Sill.			
	Highest.		Lowest.			Highest.		Lowest.	
1900.	Ft.	In.	Ft.	In.	1901.	Ft.	In.	Ft.	In.
July	15	11	15	7	January	14	9	14	4
August	15	9	15	4	February	14	11	14	3
September	15	7	14	11	March	16	8	13	11
October	15	1	14	6	April	16	0	14	10
November	14	9	14	0	May	16	3	15	9
December	14	11	14	3	June	16	3	15	10

STATEMENT showing the Highest and Lowest Depth of Water on the upper mitre sill of Lock No. 26, New Welland Canal, Port Colborne, for the fiscal year ending June 30, 1901.

Months.	Upper Sill.				Months.	Upper Sill.			
	Highest.		Lowest.			Highest.		Lowest.	
1900.	Ft.	In.	Ft.	In.	1901.	Ft.	In.	Ft.	In.
July	15	7	14	3	January	15	4	13	2
August	15	3	14	0	February	14	7	13	0
September	15	2	13	6	March	14	4	11	5
October	14	4	13	8	April	13	9	12	1
November	16	2	12	6	May	14	1	13	1
December	15	8	13	3	June	14	9	13	6

PORT COLBORNE ENTRANCE IMPROVEMENT.

PORT COLBORNE, ONT., August 24, 1901.

SIR,—I have the honour to submit the annual report on the works, known as the Port Colborne entrance improvement, for the year ending June 30, 1901.

Contract No. 13,807 was entered into on May 4, 1900, with Messrs. M. J. Hogan and Allan R. MacDonnell. The works embraced in this contract may be divided into two parts.

One part includes the removal of the present side slopes and walls on both sides of the basin at Port Colborne, and the construction of the docking formed by sinking cribwork and building upon it a concrete wall with stone filling in the rear of the wall. It also includes the cleaning up of the bottom of the present entrance and basin to the depth below the elevation of the normal water of fifteen feet to the north end of the basin, and of sixteen feet at the south end of the basin and through the entrance. Thirty-one cribs are required for the work in the basin. Ten have already been sunk on the west side and filled with stone. Four more cribs have been framed but have not been placed in position yet. One hundred and seven concrete blocks for use in the walls on the top of the cribs were made during the year.

The work of excavating in the basin is reserved for days when it is too stormy for the dredging plant to work in the lake. About forty-five thousand cubic yards have been removed and about sixty thousand cubic yards remain to be handled.

The other part of the work embraced in this contract is of the more general interest than that referred to above.

It may be described as the preliminary work necessary for the creation of a station for transferring cargoes from the large vessels used on the upper lakes to vessels of canal size.

Rock and other materials are being removed by submarine drilling and blasting and by dredging from an area of about seventy acres, and to a depth of eight feet below the mitre sills of the lock, or twenty-two feet below normal water in Lake Erie.

The plans provide for a slip six hundred feet long by two hundred feet wide, and two piers each six hundred feet by two hundred feet, connected by a head pier one hundred feet in width.

The piers and the slip will have a depth of twenty-two feet of water, and will form an extension of the present west pier.

The faces of the piers below the water will be formed of cribwork on top of which the concrete walls will be placed.

The rock excavated from the bottom of the lake will be used as filling behind the crib and concrete walls.

Five of the thirty-nine cribs required have been placed in position and filled with stone. Thirty-six thousand six hundred cubic yards of material have been removed, and forty-two thousand two hundred cubic yards have been drilled and blasted but not removed.

The total quantity of excavation in connection with this part of the work is about two hundred and six thousand cubic yards.

The progress of the work was retarded to some extent by southerly winds during the summer and fall of 1900.

The contractors' drill boats were taken to Port Dalhousie for extensive repairs during the winter, and much valuable time was lost in the spring of 1901 before the plant was ready to resume operations.

I have the honour to be, sir,
Your obedient servant,

F. LAWLOR,
Engineer in Charge.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals.

ST. PETER'S CANAL.

Department of Railways and Canals,
Canals Revenue Branch,
Canal Office, St. Peters, June 30, 1901.

Dear Sir,—I have the honour to submit my annual report on the work performed on St. Peter's canal, under my charge, during the fiscal year ending June 30, 1901.

HEAVY REPAIRS.

1. Renewed the coping on both sides of canal at south entrance.
2. Renewed the balance remaining of the old wall, on the east side of canal.
3. Renewed 150 feet of wall on the west side at north entrance of canal. There is about 150 feet more of this No. 3 section to be completed, with all necessary fenders, and some dredging will be required in order that there may be water enough for vessels to haul out of way of steamers, &c.

ORDINARY REPAIRS.

4. The pointing of the lock masonry with cement completed.
5. Placing 13 new pitch pine mooring posts on east side of canal at south entrance and 13 of same kind on west side south entrance.
6. Repairing the government road leading up on the west side of canal. Near lock and opening up the side ditches to improve drainage completed.
7. Replaced eight new brackets and sixteen new pulleys in lock wall. The angle brackets did not fit and had to have them recasted and will have them placed at an early date, also renewed five new lock chains.

There are other improvements required at south entrance, which were pointed out to E. V. Johnson, Esq., Inspecting Engineer.

Navigation closed on St. Peter's canal on January 5, 1901, and opened April 9, 1901. During the fiscal year ending June 30, 1901, 1,603 steamers and vessels passed through the St. Peter's canal.

There is one tidal lock and four pairs of gates on St. Peter's canal.

The operation at this present time is in first-class condition.

I have the honour to be, sir, your obedient servant,

JNO. H. DEVEREAUX,

Collingwood Schreiber, Esq., C.M.G.,
Chief Engineer and Deputy Minister,
Railways and Canals, Ottawa, Ont.

OTTAWA RIVER SURVEYS.

Report by Henry A. F. MacLeod, M. Inst. C.E., on Surveys made in the Autumn of 1900.

193 Sparks Street,
Ottawa, March 13, 1901.

Sir,—In compliance with your instructions of August 28, directing me to make a survey of the Ottawa river, from the head of the Allumette Rapids, near Pembroke, to Portage du Fort, and subsequently, of the Culbute and Calumet channels, I beg to say that preparations were at once commenced for carrying out the same.

The object of the survey was to ascertain the best route for a canal of the same scale of navigation as the St. Lawrence canals, or of 14 feet draught of water, with locks, 280 feet long and 45 feet wide, with approximate estimates of the cost of construction.

The route selected by Mr. T. C. Clarke, of this portion of the river, and on which his reports and estimates of 1860 are based, leaves the Allumette lakes at the head of the Allumette island, and passes down the Culbute Channel, through Lake Coulonge and the Rocher Fendu channel.

Surveys have now been made, though not entirely complete, of the routés on each side of the Allumette and Calumet islands.

Two parties were engaged in carrying out the work of examination.

Mr. Henry Carre, in charge of one party, having completed his camp outfit, and secured some experienced river men at Pembroke, left that place on September 14, and proceeded down the river to Black's Falls, near the head of the Rocher Fendu channel, where the rest of his party met him with tents, &c.

Soundings were taken on the way down from Pembroke to the foot of Lake Coulonge, which show that there is deep water to the Allumette rapids.

In the lower Allumette lake the water is shoal along the north shore for a considerable distance. From the foot of Paquette rapids to the foot of Lake Coulonge deep water can be found.

The survey was commenced at the foot of Black's Falls, on September 18, and was continued down the Rocher Fendu channel to the Sable rapids at the foot of Calumet Island.

Levels were then taken to the head of the Grand Calumet Falls, near Bryson, and the survey was carried on down the Calumet channel to Split Rock rapids, two miles from Portage du Fort. A connection was made with the Rocher Fendu survey at Sable rapids.

Outside work was discontinued on December 10, in consequence of the state of the river, the ice preventing the use of boats and not being strong enough to carry on foot.

In consequence of the very broken and rocky shores of the Rocher Fendu channel, and the very rapid descent in the waters, it was necessary to conduct the survey almost entirely by triangulation, using also micrometers, only short base lines could be measured here and there. It was also very difficult to get soundings as the rapids can only be navigated at intervals. The triangulation points have been well marked on the rocks, and with stout hubs and stakes where practicable.

Bench marks have been established on the rocks and on trees, their positions are shown on the plans and profiles. The levels have all been throughly checked.

The proposed sites of locks in the Rocher Fendu channel, at Black rapids, Norman's, LaFontaine's, Long rapids and Rocher Fendu chute, with the necessary dams and prism excavations were surveyed and cross-sectioned where it was possible to do so. The same was done for the lock sites in the Calumet channel, at the Grand Calumet, three at Dargais and Sable rapids.

The fall in the water between the head of Black's Falls and the foot of Rocher Fendu chute is 80 feet, the distance 7½ miles. Of this ¾ mile will be occupied by the locks and channel requiring excavation when the water in the reaches is raised to the proposed height.

There are several abrupt bends in the direction of this channel, which will require curves of about seven hundred feet radius.

In the Calumet channel, between the head of the Grand Calumet and the foot of the Sable Rapids, there is a fall of 84 feet, in a distance of five miles. About one-fifth miles of this distance is taken up with locks and shoal water.

Some sharp curves, about seven hundred feet radius, will be required near the Calumet and Mountain Rapids.

The other party was in charge of Mr. H. G. Stanton, who is the first place went to Rutherglen, on the Canadian Pacific Railway, to have his camping outfit shipped from there to Pembroke.

While in that neighbourhood, he searched for and found one of Mr. Shanly's bench marks, made in 1857, at the lower end of Talon lake, and connected his own levels taken for me in 1899 with Mr. Shanly's.

He then proceeded to Pembroke, where he met the rest of his party, and commenced the survey of the Allumette rapids on September 18.

Of the three channels into which these rapids are divided, the north one, next the Allumette island, was selected for examination. The centre channel, and the one next to the Ontario shore, were also hastily examined. The centre channel is not so favorable as the north, and the other next the Ontario shore, is very shallow at the western entrance, while towards the east end, an extensive cutting through granite would have to be made.

In the entrance to the north channel, deep water is found to the head of Morrison's island, which bounds it on the south.

The survey was carried on down the rapids, to the lower Allumette lake. Soundings on the shallows of this lake were not taken, it being thought advisable to wait until the ice has formed.

The east and west channels of the Paquette rapids were surveyed, more attention being given to the western, because the most suitable for the canal.

A more hasty survey was then made, up the Culbute channel, from the foot of the Paquette rapids, to the last of the islands and shoals which obstruct navigation, about 2 miles east of Fort William.

Lastly, soundings were taken from the foot of Paquette rapids to La Passe, at the head of Calumet island, when work had to be suspended on December 10 in consequence of the state of the river.

The shores of the Allumette and Paquette rapids are low and even, and the waters can be navigated at most places. The surveys were therefore made by traverse lines along the shore, which were well marked, while the soundings were taken with micrometer measurements. All levels have been carefully checked. The sites for two locks were surveyed and cross-sectioned, one at the foot of the Allumette rapids, on Morrison's island, and the other at the foot of the Paquette rapids, on the Alumette island shore.

The lift for the lock to overcome the Allumette rapids is 23 feet, and that for the Paquette rapids 25 feet, which latter will be reduced a few feet, when the water in the lower reach is raised, as intended.

The survey up the Culbute channel, from the foot of the Paquette rapids to near Fort William, was made with the transit and micrometer. The soundings were also made with the micrometer.

This is an alternative route to that by the Allumette lakes and is about 10 miles shorter.

From high water in the lake, near Fort William, to low water at the foot of Paquette rapids, 18 miles, there is a fall of 32 feet, which will require two locks, one at Chapeau, and the other at L'Islet, where the present wooden locks are situated,

As the waters are now, shoals of rock and sand are found for 7½ miles of the above distance. When the lock at Chapeau is put in, the shallow water will be reduced to 6 miles.

The Black river joins the Ottawa about two miles above the foot of Paquette rapids, and carries down yearly a large quantity of sand ; this can be diverted by a new channel to Coulonge lake.

The Culbute channel is generally narrow and crooked, widening out occasionally into small lakes. Above the Culbute locks, there are about 2,000 feet of narrow and crooked channel, with perpendicular granite rocks, 40 feet high at the water's edge. At one point they are only 85 feet apart, and it will require a considerable expenditure to make it suitable for large vessels to pass with safety.

Above this, there are some small shoals till the upper narrows are reached, where the channel is 120 feet wide. Beyond there is sufficient water to Deep river.

In the Pembroke channel, through the Upper Allumette lake, about 6 miles above Pembroke, there is a shoal which is being deepened to 8 feet by the Department of Public Works, and beyond this, other shoals will be encountered, until deep water is reached, about two miles to the east of Fort William.

Upon examining some profiles (by G. H. Perry, C.E., in 1877) in this office, after the above surveys were made, it was discovered that in 1876, the flood water rose to a height of five and a half feet above the high water of 1857, upon which the estimates made in 1860 were based. The high water mark of 1876 has also been nearly reached in subsequent years.

The large volume of water produced by such high water, as that of 1876, if allowed to pass through the narrow portions of the Rocher Fendu channel, when the dams are built, would create currents, possibly exceeding 7 miles per hour, which would make the navigation unsafe.

The flood waters if turned down through the Calumet channel would probably be very destructive to its low lying sandy banks, so it is considered to be safer to change the location of the canal to the Calumet channel, and to send all the flood water down the Rocher Fendu channel, admitting only sufficient water for navigation and other purposes to pass into the Calumet channel. The length of the Calumet channel, cutting across the low marshy point between Grand Marais and the village of Coulonge, will be about three miles longer than that by the Rocher Fendu channel.

The following is a description of the work required in the Calumet channel from the village of Coulonge to the foot of the Paquette rapids, and from the foot of the Paquette rapids via the Culbute channel to deep water about two miles east of Fort William.

Commencing at the lower end of the Calumet channel below the Sable rapids, the proposed raised water, now, is some 6 feet lower than that in Mr. Clarke's estimate which will reduce the height of the long dams and the lock at Portage du Fort, just so much.

At Sable rapids there will be a lock of 17 feet lift, at Mountain rapids of 15 feet, and at the Grand Calumet rapids two of 24 feet each, and one of 17 feet, which will be a guard lock. There are no combined locks intended. The locks are of concrete with masonry facing above the 14 feet line. Each lock is provided with tight dams of concrete or crib-work and concrete, and all have regulating weirs. The upper dam at the head of the Calumet rapids is intended to hold back all the flood water and send it down through the Rocher Fendu channel. A new dam will be built in Flat rapids at the head of the Rocher Fendu channel, in place of the old one now built, to control the low water level from the Calumet rapids to the lock at Chapeau. There are entrance piers of crib-work at all the locks.

Between the locks the channel is excavated to a depth of 16 feet below raised water, the base of the excavation being as in all other channels, 100 feet wide, with slopes in earth of two to one, and in rock of one-quarter to 1.

The estimated cost of this section, five miles long, amounts to $1,670,900 as shown in appendices A, B, C, D, E and F.

From the head of the Grand Calumet to the mouth of the Coulonge river, no survey has been made by me, but an estimate is made from Mr. Perry's profile made in 1877.

These quantities will likely be much reduced when a proper location of the channel is made. The cutting across the Grand Marais will cost $200,000 more than by La-Passe but will save four miles of distance.

From the mouth of the Coulonge river to the foot of the Paquette rapids soundings were taken by Mr. Carre, and an estimate is made from those. Only one shoal is found in this part, near the head of Lake Coulonge.

Two public road, swing bridges, will be required.

The cost of this section from the head of the Grand Calumet to the foot of the Paquette rapids, 25 miles long, including the new dam at Flat rapids, and a small dam over a stream which flows across the north end of Calumet island, is shown in Appendix 'G,' and amounts to $801,600.

From the foot of the Paquette rapids up the Culbute channel to deep water, about two miles east of Fort William, the estimate is based upon Mr. Stanton's survey.

There is a large amount of material that can be dredged, and there is also rock to be excavated between the foot of Paquette rapids and the proposed lock at Chapeau.

This lock has a lift of 15 feet with guide piers of crib-work.

It is intended to hold back the flood waters by a tight dam at Culbute. There will also be a tight dam at the Chapeau lock. These dams are of concrete and have regulating weirs in each. There will be a swing bridge at Chapeau for the public road.

Only a small quantity of rock excavation is required between the Chapeau lock and the Culbute lock.

This lock has a lift of 17 feet and has guide piers of crib-work.

From the Culbute lock to the end of the section, two miles east of Fort William, a few shoals of rock are found, and the channel between some high points of rock will have to be widened.

The cost of this section from the foot of the Paquette rapids to deep water east of Fort William, 17½ miles long, is found in appendix 'H,' and amounts to $1,319,470.

The estimated cost of the whole section from the Sable rapids to near Fort William, 47½ miles long, appendix 'I,' amounts to $3,791,970.

Good stone for lock masonry can be found at Portage du Fort, on the Calumet Island, and on the islands in the Allumette rapids near Pembroke.

I have the honour to be, sir, your obedient servant,

HENRY A. F. MACLEOD,
M. Inst. C. E.

APPENDIX A.—SABLE RAPID, LOCK No. 5.

Estimated cost of Lock No. 5, with Excavation, Dams, Crib-work, &c., required.

Description.	Quantity.	Unit.	Rate.	Cost.
			$ cts.	$
Guide piers	9,333	C. yds.	4 00	37,332
" "	8,889	"	4 00	35,556
Excavation in approaches	4,262	"	1 00	4,262
Excavation in lock-pit	18,161	"	1 00	18.161
Sable Rapid Lock 12 ft. lift				105,000
Gates				11,700
Culvert sluices				1,200
Gate machinery				1,000
Cribwork in dam	2,074	C. yds.	4 00	8,296
Planking	10,000	B. M.	20 00	200
Concrete in dam	2,854	C. yds.	6 00	17,124
" "	4,622	"	6 00	27,732
" "	105	"	6 00	630
Dam embankment earth	8,500	"	25	2,125
Lock embankment	9,000	"	50	4,500
Sluices for regulating weir				1,500
Unwatering				25,000
Add for engineering and contingencies				60,282
				361,600

HENRY A. F. MACLEOD,
HENRY CARRE.

APPENDIX B.—MOUNTAINS RAPIDS, LOCK No. 4.

Estimated cost of Lock No. 4, with Excavation, Dams, Crib-work, &c., required.

Description.	Quantity.	Unit.	Rate.	Cost.
			$ cts.	$
Guide piers	10,667	C. yds.	4 00	42,668
" "	7,556	"	4 00	30,224
Excavation in Lock pit and approaches	12,000	"	1 00	12,000
Mountain Rapid Lock 15 ft. lift				117,000
Gates				12,600
Culvert sluices				1,200
Gate machinery				1,000
Concrete in dams	967	C. yds.	6 00	5,802
" "	289	"	6 00	1,734
Dam embankment	1,800	"	25	450
Embankment for Lock	10,000	"	50	5,000
Sluices for regulating weir				1.500
Unwatering				15,000
Add for engineering and contingencies				49,222
				295,400

HENRY A. F. MACLEOD,
HENRY CARRE.

APPENDIX C.—GRAND CALUMET FALLS.

Estimated cost of Lock No. 3, with Excavation, Dams, Crib-work, &c., required.

Description.	Quantity.	Unit.	Rate.	Cost.
			$ cts.	$
Guide piers	8,889	C. yds.	4 00	35,556
" "	4,444	"	4 00	17,776
Excavation in lock pit	11,623	"	1 00	11,623
No. 3 lock, 24 feet lift				151,300
Gates				15,900
Culvert sluices				1,200
Gate machinery				1,000
Cribwork in 3rd dam	1,482	C. yds.	4 00	5,928
Planking	8,000	B.M.	20 00	160
Concrete in 3rd dam	3,600	C. yds.	6 00	21,600
3rd dam embankment	9,000	"	25	2,250
Embankment for lock No. 3	9.000	"	50	4,500
Sluices for regulating weir				1,500
Unwatering				15,000
Add for engineering and contingencies				57,007
				342,300

HENRY A. F. MACLEOD,
HENRY CARRE.

APPENDIX D.—GRAND CALUMET FALLS.

Estimated cost of Locks Nos. 1 and 2, with Excavation, Dams, Cribwork, &c., required.

Description.	Quantity.	Unit.	Rate.	Cost.
			$ ots.	$ cts.
Guide piers, cribwork	8,889	C. yds.	4 00	35,556
Excavation of rolling dam now in use.	1,112	"	2 00	2,224
Excavation of lock pit	12,265	"	1 00	12,265
No. 1 lock, 17 feet lift				123,900
Gates				16,000
Culvert sluices				1,000
Gate machinery				1,000
Passing basin	10,284	C. yds.	1 00	10,284
Excavation of lock pit No. 2.,	15,073	"	1 00	15,073
No. 2 lock, 24 feet lift				151,300
Gates				15,900
Culvert sluices				1,200
Gate machinery				1,000
Cribwork in dam	3,556	C. yds.	4 00	14,224
Planking	22,000	B.M.	20 00	440
Concrete dam, lock No. 1	4,287	C. yds.	6 00	25,722
Dam across channel from Island to left bank	1,600	"	4 00	6,400
Cribwork, lock No. 2.				
Planking	8,000	B.M.	20 00	160
Concrete for same	602	C. yds.	6 00	3,612
Wooden dam for mill	556	"	4 00	2,224
Crib along right bank of passing basin, guide	2,778	"	4 00	11,112
Pier				
1st dam embankment earth.	10,000	C. yds.	25	2,500
Embankment for lock No. 1	6,700	"	50	3,350
2nd dam embankment earth	1,800	"	25	450
Embankment for lock No. 2.	8,000	"	50	4,000
Sluices for two regulating weirs				3,000
Unwatering				40,000
Add for engineering and contingencies				100,904
				605,000

HENRY A. F. MACLEOD,
HENRY CARRE.

APPENDIX E.—CALUMET CHANNEL.

ESTIMATE of cost of Removing Obstructions in Channels.

From.	To.	Obstructions.	Earth.	Rock.	Rate.	Cost.
					$ cts.	$
60 + 50	69	Cut accross point below Mountain Rapid	25,874	....	25	6,468
60 + 50	69	" "	....	12,936	1 00	12,936
136	141	Dargais Rapid	....	4,850	1 00	4,850
195 + 50	200 + 50	Sand Shoal..............	4,716	....	0 15	708
....	....	125 ft. of dam 13 x 20 to be removed	....	1,200	1 00	1,200
226 + 50	229	" "	....	10,640	1 00	10,640
232	237	Straightening channel....	....	13,665	1 00	13,665
272 + 25	273 + 50	Sand Shoal above Grand Calumet Rapids	480	....	0 15	72
....	....	Add for engineering and contingencies........	....	....	....	10,061
						60,600

HENRY A. F. MACLEOD,
HENRY CARRE.

APPENDIX F.—CALUMET CHANNEL.

SUMMARY of cost, Sable Rapids to Grand Calumet.

Lock Nos. 1 and 2	$ 605,000
Lock No. 2	342,300
Mountain Rapid Lock No. 4..	295,400
Sable Rapid Lock No. 5..	361,600
Obstructions in Channels..	60,600
Land and Damages..	6,000
	$ 1,670,900

HENRY A. F. MACLEOD,
HENRY CARRE.

APPENDIX G.—CALUMET CHANNEL.

From Head of Calumet Falls to Paquette Rapids.

Estimate of cost of Rock Excavation, Dredging, Dams, &c., required

Description.	Quantity.	Unit.	Rate.	Cost.
			$ cts.	$
Earth excavation, head of Calumet Falls to mouth of Coulonge River (dredding)	1,872,390	C. yds.	0 15	280,858
Rock excavation	14,347	"	1 50	21,520
Cribwork in dams across main channel at Flat Rapids.	6,770	"	4 00	27,080
Planking in dams	9,900	B. M.	20 00	198
Dam embankment.	2,024	C. yds.	0 50	1,012
Dredging southerly channel, head of Coulonge Lake.	60,000	"	0 15	9,000
Stone lining Grand Marias Cut				50,000
Swing bridges at Bryson and Coulonge				70,000
Engineering and contingencies				91,932
Land damages				250,000
				801,600

HENRY A. F. MACLEOD,
HENRY CARRE.

APPENDIX H.—CULBUTE CHANNEL.

Including Locks, Dams and Crib-work.

Description.	Quantity.	Unit.	Rate.	Cost.
			$ cts.	$
Guide piers above and below locks	42,740	C. yds.	4 00	170,960
Earth excavation in channel	832,924	"	0 15	124,939
Rock " "	199,607	"	1 50	299,411
Rock excavation in lock pits	19,181	"	1 50	28,772
Lock, 15 ft. lift				117,000
Gates				12,600
Culvert sluices				1,200
Gate machinery				1,000
Lock, 17 ft. lift				123,900
Gates				16,000
Culvert sluices				1,000
Gate machinery				1,200
Concrete dams	11,947	C. yds.	6 00	71,682
Sluices in dams.				3,000
Embankment behind lock walls.	30,000	C. yds.	0 50	15,000
Dam embankment	12,913	"	0 25	3,228
Swing Bridge at Chapeau	Sum.			12,000
Removing old wooden locks	15,000	C. yds.	2 00	30,000
Unwatering	Sum.			25,000
Engineering and contingencies				211,578
Land and damages				50,000
				1,319,470

HENRY A. F. MACLEOD,
H. G. STANTON.

APPENDIX I.—CALUMET AND CULBUTE CHANNELS.

Summary—Total Estimated cost from Sable Rapids to Deep Water near Fort William.

Miles.		$
5	Sable Rapids to head of Calumet Rapids, Appendix F	1,670,900
25	Calumet Rapids to foot of Paquette Rapids " G	801,600
17½	Paquette Rapids to near Fort William " H	1,319,470
47½		3,791,970

HENRY A. F. MACLEOD.

OTTAWA RIVER SURVEYS.

193 Sparks Street,
Ottawa, March 13, 1901.

Collingwood Schreiber, Esq., C.M.G.,

Dear Sir,—Referring to my report to you on the Ottawa river surveys, of March 13, which did not contain an estimate for the Allumette and Paquette rapids, I now beg to inclose one, being for 14 feet navigation, as follows :—

Alumette rapids	$ 652,000
Paquette rapids	942,000
Total	$1,594,000

This does not include the cost of a considerable amount of rock excavation required in the Lower Allumette lake, and also in the Upper Allumette lake, between Pembroke and Fort William.

I am, yours truly,
HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

ESTIMATE in Allumette Rapids for 14 feet draught from Upper Allumette to Lower Allumette Lake. Length of Canal and approaches, 5,400 feet.

Description.	Quantity.	Price.	Amounts.
		$ cts.	$ cts.
Rock excavation in prism	245,823	1 00	245,823 00
" " lock pit	29,089	1 50	43,643 00
Cribwork in cross dam	7,000	3 00	21,000 00
Wing walls above lock	1,700	4 00	6,800 00
Earth embankment above lock	4,300	0 50	2,150 00
Guide piers below lock	11,850	4 00	47,400 00
Lock, 23 feet lift			147,400 00
Lock gates			17,100 00
Culvert sluices			1,200 00
Gate machinery			1,000 00
Unwatering			10,000 00
Engineering and contingencies			108,484 00
Total			652,000 00

HENRY A. F. MACLEOD,
H. G. STANTON.

Ottawa, April 25, 1901.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

(Length of Canal approaches, 2·69 miles.)

ESTIMATE in Paquette Rapids for 14 feet draught from foot of Lower Allumette Lake to Calumette Channel.

Description.	Quantity.	Price.	Amounts.
		$ cts.	$ cts.
Rock excavation in prism	336,301	1 00	336,301 00
" " lock pit	30,000	1 50	45,000 00
Water tight embankment on islands	42,547	0 50	21,274 00
Cribwork in dams in openings between islands	8,073	3 00	24,219 00
" dam at lock site	33,300	3 00	99,900 00
" approaches above and below lock	11,187	4 00	44,748 00
Siphon culvert say (2,300 ft.)			25,000 00
Lock, 25 feet lift			156,000 00
Lock gates			20,100 00
Culvert sluices			1,200 00
Lock gate machinery			1,000 00
Unwatering say			10,000 00
Engineering and contingencies			157,258 00
Total			942,300 00

HENRY A. F. MACLEOD,
H. G. STANTON.

Ottawa, April 25, 1901.

193 SPARKS STREET,
OTTAWA, March 21, 1901.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

SIR,—I beg to inclose a copy of an estimate of the cost of the proposed Montreal, Ottawa and Georgian Bay canal, from Montreal to Georgian bay.

The estimate is based on the surveys of Mr. T. C. Clarke, made in 1859, on the recent survey of the summit-section, from Talon lake to Lake Nipissing, also on information obtained from Mr. H. G. Stanton, in reference to the work, between Lake St. Louis and Ottawa.

The estimate is for 14 feet navigation with 16 feet in the open reaches, the locks of 280 feet long and 45 feet wide. The number of locks has been reduced from 64 to 50 by increasing the lifts, and there are now only two sets of combined locks instead of thirteen.

As the level of water in the reaches is unchanged, Mr. Clarke's estimate for the dams and walls remains the same, except in a few unimportant instances.

I inclose the details of Mr. Stanton's estimate from Lake St. Louis to Ottawa, and the details of my estimates from Ottawa to the Georgian bay, including those for the summit section of October 28, 1899. Also a list and description of the locks, &c.

I have the honour to be, sir, your obedient servant,

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY NAVIGATION.

ESTIMATED COST OF WORKS FROM MONTREAL TO GEORGIAN BAY.

Based on Mr. T. C. Clarke's surveys and on the recent survey of the summit section, Talon lake to Lake Nipissing, 14 feet navigation.

Ste. Anne's to Ottawa	$ 3,263,000
Ottawa to Lake Deschenes	1,105,000
Lake Deschenes to Talon lake	7,433,000
Talon lake to Lake Nipissing Summit section	5,170,000
Lake Nipissing to Georgian bay (French river)	1,067,000
C.P. Ry. bridge, $100,000, six road bridges, $110,000	210,000
Engineering and contingencies, 20 per cent	3,650,000
Land and damages	2,000,000
	$23,898,000

HENRY A. F. MACLEOD,
M. Inst. C. E.

OTTAWA, February 12, 1900.

NOTE.—In the above estimate the levels of the water stretches are not changed but are the same as proposed by T. C. Clarke.
Ottawa, April 26, 1900. H. A. F. MACL.

OTTAWA, February, 1900.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Description of work required to be done to get 14 feet navigation or 16 feet in prism, Lake St. Louis to Ottawa.

About two miles of excavation will have to be done below Ste. Anne's lock to deep water in Lake St. Louis. The present channel is very crooked and is only for 9 feet navigation.

Estimated excavation required for a 14 foot channel, 70,000 cubic yards at $1.50, $105,000.

Ste. Anne's lock (lock No. 1) will have to be rebuilt, also retaining walls above and below lock, length of walls about 1,500 feet.

Rock excavation required in present channel about 10,000 cubic yards in a distance of about ½ mile, and about 35,000 cubic yards, hard-pan, in a distance of about 1 mile ; the rock cutting is about in the middle of this piece of work.

About three miles from Ste. Anne lock there is a shoal or bar across the channel of about ½ mile wide which will have to be cut through from this point to St. Placide light, a distance of about 17 miles, there is deep water varying from 20 to 40 feet. At St. Placide light, there is a bar of boulders and rock about three-quarters of a mile wide running across the lake. Beyond this bar to the foot of Jones's island, a distance of 5 miles, the depth of water varies from 12 to 20 feet. The cuttings here will be through clay and sand.

From the foot to the head of Jones's island in a distance of about three miles, there will be encountered rock hard-pan and boulders, the cuttings here will be comparatively heavy, as there is difficulty in getting through at low water. At about 500 feet above Jones's island there is a small sand shoal to be removed from this point to the entrance of the Carillon canal, a distance of about seven miles, the river is quite deep, varying from 20 to 40 feet. I have estimated all the work through the Lake of Two Mountains at $300,000, which I consider a fair one, based, as it is, only on my knowledge of the lake during many trips in steam and sailing yachts, and also to passing through it last fall in a yacht taking soundings with a sweep suspended at 16 feet from the water surface.

Rebuilding Carillon Lock (Lock No. 2) $97,000.

In this case I have estimated for an entirely new lock, as it will not be possible to lengthen or deepen the existing one without interfering with navigation. I have estimated the excavation in the prism of this canal at $120,000, which will possibly cover the cost of lock pit excavation as well.

I have taken into account the possibility of raising the water in the prism by raising the embankment on the south side of the canal, otherwise the cost at this point will be considerably increased.

Rebuilding Guard Lock (No. 3 at head of Carillon Canal).

This lock will also have to be an entirely new one. I have estimated it at $112,000 which is low, owing to the excavation in lock pit being included. There is about 5 miles of river navigation from the head of Carillon canal, which will have to be improved. Immediately after leaving the canal, there is a shoal of about three-quarter miles which I have considered as rock ; the work here will be light.

At Chute au Blondeau, about 4 miles further up the river, there is a bar running across ; here the work will be rather heavy, as the present channel is narrow and hardly deep enough for 9 feet at low water. This bar is about three-quarters of a mile in width. During the winter season, it is not possible to get soundings in this portion of the river owing to the fragile ice.

Rebuilding Lock at Lower Entrance of Grenville Canal (Lock No. 4).

This lock will have to be an entirely new one, the cost of which will be $97,000.

There is a passing basin of about 500 feet in length, the prism of which will have to be lowered, the cost of which I have estimated at $15,000. In doing so I have allowed a good margin for rebuilding retaining wall and weir.

Lock No. 5 will have to be an entirely new one, and has been estimated at $112,000.

From lock No. 5 to lock No. 6, at Stonefield, a distance of about 1 mile, the prism of the canal will have to be lowered from 10 feet, as it now is, to 14 feet, and the width from 45 to 50 feet as at present to 100 feet.

I have estimated this at $133.000, made up as follows :—Rock, 115,000 cubic yards at $1 ; earth excavation, 75,000 cubic yards at 25 cents. This estimate includes a weir which will have to be rebuilt, also lowering the tail race to river.

Lock No. 6 will have to be an entirely new one, the cost of which is estimated at $82,000 ; there wil be a road-bridge across this lock, which I have estimated at $1,500.

Rock excavation in prism from lock No. 6 to lock No. 7, a distance of about 8 miles, I have estimated at $460,000. Earth excavation in slope and embankment, 300,000 cubic yards at 25 cents = $75,000.

Lock No. 7 will have to be an entirely new one and has been estimated at $93,000.

Rock excavation in prism from lock No. 7 to lock No. 8, a distance of about 1 mile, I have estimated at $115,000. Earth excavation in slope, estimated at 80,000 cubic yards at 25 cents = $20,000.

Lock No. 8 will have to be an entirely new one, and has been estimated at $112,000.

There is a road-bridge across the lock which has been allowed for at $1,500.

From lock No. 8 to the upper entrance of the canal, a distance of about 2,000 feet, the prism will have to be lowered, and the present masonry walls on either side will have to be rebuilt, as at present the standard width of 100 feet cannot be obtained. These walls are about 28 feet high.

I have estimated the cost of rebuilding these walls at $150,000. Rock excavation in this portion of the canal, I have estimated at $50,000.

I have included dams, pumping, &c., in my estimate and have allowed $100,000 for this item.

From the head of Grenville canal to L'Orignal wharf is about 6 miles, where the first shoal occurs, or more correctly, a series of shoals in a distance of about ¾ miles. I have estimated the cost of removing them at $15,000.

From the nature of the shore formation, I consider these shoals to be of clay and boulders.

The river here is quite wide, being fully ¾ of a mile, and is known locally as L'Orignal bay.

About 2 miles from l'Orignal wharf, another clay and boulder shoal occurs, which appears to be about of the same dimensions as the last. I have estimated the cost of removing this at $15,000.

From this point to Clark's Island, a distance of about 20 miles, the river is from 20 to 40 feet deep and varying from 1,000 to 2,000 feet in width.

At Clark's Island the channel is narrow and crooked ; here the shoal appears to be of rock with hard pan and boulders, and is between ¾ to 1 mile long.

I have estimated the cost of removing this shoal at $75,000, which I consider ample.

From Clark's Island to the Blanche river, a distance of about 20 miles, the river is deep, varying from 20 to 40 feet and varying in width from 1,000 to 2,000 feet. Here a series of shoals occur for the next 14 miles; only at one point, however, at about half way, does rock appear, and then only for about ½ a mile, the rest of the shoal being clay and boulders and sand—the sand shoal occurring at the upper side of the rock shoal. I have estimated the cost of removing these shoals at $250,000, which may, after an instrumental survey, prove to be below rather than above the mark.

In estimating the work required through the Grenville and Carillon canals, I have added $360,000 to cover the cost of increasing the width of present prism and for lock pit excavations, which I consider ample. All these figures are subject to revision, as they are based wholly on observations, guided from a residence of some years on these works.

A summary of the work required in a condensed form is attached, to which I have added 8 pairs of lock gates at $7,000.

ESTIMATE of cost for 14 foot navigation or 16 feet in the prism from Lake St. Louis to Ottawa.

Rock excavation in present channel to Ste. Anne's lock (lock No. 1)	$ 105,000
Rebuilding Ste. Anne's lock	82,000
Rock excavation in present channel	15,000
Hard pan excavation	31,500
Removing shoals through Lake of Two Mountains	
Removing hard pan shoal at about 3 miles from Ste. Anne	10,000
Removing shoal at St. Placide rock	50,000
Hard pan excavation from St. Placide to foot of Jones' island	100,000
Rock excavation from foot to head of Jones' island	100,000
Rebuilding Carillon lock (lock No. 2)	97,000
Rock excavation in prism of Carillon canal	120,000
Rebuilding guard lock, Carillon canal (lock No. 3)	112,000
Removing shoals between Carillon and Grenville canals.	50,000
Rebuilding lock No. 4 at Greece's Point	97,000
Raising embankment between locks 1 and 2	15,000
Rebuilding lock No. 5	112,000
Rock excavation in prism of canal from lock No. 5 to No. 6, about 1 mile	115,000
Earth excavation in prism of canal from lock No. 5 to No. 6, about 1 mile	20,000
Bridge lock No. 6	1,500
Rebuilding lock No. 6	82,000
Rock excavation in prism from lock No. 6 to No. 7, about 4 miles	460,000
Earth excavation in prism from lock No. 6 to No. 7, about 4 miles	75,000
Rebuilding lock No. 7	93,000
Rock excavation from lock No. 7 to lock No. 8, about 1 mile	115,000
Earth excavation from lock No. 7 to lock No. 8, about 1 mile	20,000
Bridge at lock No. 8	1,500

Rebuilding lock No. 8	$112,000
Rock excavation from lock No. 8 to deep water	50,000
Rebuilding dry walls above lock 8	150,000
Dams, pumping, &c., &c.	100,000
Removing shoal at L'Orignal	15,000
" " head of bay	15,000
" " Clark's Island	75,000
" shoals from River Blanche to head of Kettle Island, about 14 miles, say	250,000
Total	$2,846,500
Add 50 per cent to earth and rock excavation in prism of Grenville canal	360,000
Eight pair lock gates at $7,000	56,000
	$3,262,500

H. G. STANTON.

ESTIMATE of cost for a 14 foot navigation (16 feet in the prism).

OTTAWA TO DESCHENES.

Description.	Quantity.	Unit.	Rate.	Cost.
	C. yds.	C. yds.	$ cts.	$ cts.
Rock excavation (Clarke)	244,000			
Add ¼ for 14 ft. navigation	61,000			
Add for deeper locks, 24 ft. lift	26,400			
		331,400	0 90	298,300 00
Rock excavation under water		8,400	1 50	12,600 00
" at Remoux		16,000	2 00	32,000 00
Removing old works				1,900 00
Embankment		35,000	0 30	10,500 00
2 locks, 24 ft. lift				302,600 00
" 12 "				209,800 00
8 pairs gates				52,000 00
32 culvert gates				9,600 00
Swing bridge				12,000 00
Dams and canal walls (Clarke)				110,000 00
Coffer dams				54,000 00
				1,105,300 00

HENRY A. F. MACLEOD.

LAKE DESCHENES TO TALON LAKE.

SUMMARY of Estimates based on T. C. Clarke's plans—Water Levels not changed.

Page.		
1.	Lake Deschenes	$ 71,000
1.	Chats Canal	837,000
2.	Chenaux Canal	150,200
2.	Portage du Fort	349,900
3.	Rocher Fendu Chute	201,300
3.	Long Rapids	307,400
4.	La Fontaine's Rapids	307,200
4.	Norman's Rapids	238,400
5.	Black's Falls	190,600
	Lake Coulonge	500,000
6.	Chapeau, L'Islet and Culbute	380,200
6.	Des Joachims	494,200
7.	McSorley's	225,500
8.	Rocher Capitaine	650,800
8.	Deux Rivières	636,300
9.	Johnson's Rapids	395,200
9.	Plein Chants	225,100
10.	De la Rose	174,700
10.	Paresseux Chute	248,800
11.	Petite, Paresseux	234,500
11.	Talon Chute	369,200
12.	Talon Lake Rapids	128,700
12.	Talon Lake Narrows	116,700
		$ 7,433,000

For details of above see following pages.

HENRY A. F. MACLEOD.

SUMMARY of Estimates—*Continued.*

Estimates of Quantities.	C. Yds.	Cost.	Amount.	Total.
Lake Deschenes.		$ cts.	$	$
From Mr. Shanley's report page 6, Say 2,600 ft. x 9 ft. of cutting	88,600	0 80	71,000	71,000
Chats Canal.				
Earth excavation	156,000	0 25	39,000	
Rock excavation	153,000	1 00	153,000	
Rock excavation and pumping	12,000	2 00	24,000	
2 locks, 24 ft. lift 1 of 13 ft. lift			411,400	
6 pairs gates complete, say			43,000	
12 culvert gates			3,600	
1 regulating weir and 2 gates			12,000	
Dams and piers (Clarke) Timber stone filling, &c			118,000	
Coffer dams (Clarke) Half to be removed			33,000	
				837,000
Cheneaux Canal.				
Rock excavation 16,000 c. yds. (Clarke) Add ⅕th 3,400	20,000	1 50	30,000	
Embankment (17,000 c. yds. (Clarke)	17,000	0 30	5,100	
1 lock, 6 ft. lift			82,400	
2 pairs lock gates, say			10,000	
4 culvert gates, say			1,200	
Dams and piers (Clarke)			16,500	
Coffer dams to be removed (Clarke)			5,000	
				150,200
Portage du Fort.				
Rock excavation	80,900	1 25	101,100	
Embankment	7,000	0 30	2,100	
1 lock, 24 ft. lift			151,300	
2 pairs lock gates			15,000	
4 culvert gates			1,200	
Dams (Clarke)			75,000	
Coffer dams ⅓ removed (Clarke)			4,200	
				349,900
Rocher Fendu.				
Rock excavation	16,500	1 50	24,800	
Embankment	8,000	0 30	2,400	
1 lock, 18 ft. lift			127,900	
2 pairs gates			13,000	
4 culvert gates			1,200	
Dams (⅙th Clarke)			30,000	
Coffer dam (Clarke)			2,000	
				201,300
Long Rapids.				
Rock excavation	24,500	1 50	36,800	
Embankment	8,000	0 30	2,400	
1 lock, 13 ft. lift } combined.			108,700	
1 lock, 13 ft. lift } combined.			108,700	
3 pairs lock gates			17,000	
6 culvert gates			1,800	
Dams (⅙th Clarke)			30,000	
Coffer dams (Clarke)			2,000	
				307,400
La Fontaine Rapids.				
Rock excavation	25,700	1 50	38,600	
Embankment	8,000	0 30	2,400	
1 lock, 12 ft. lift			104,900	
1 lock, 12 ft. lift			104,900	
4 pairs gates			22,000	
8 culvert gates			2,400	
Dams (⅙th Clarke)			30,000	
Coffer dams (Clarke)			2,000	
				307,200

SUMMARY of Estimates—*Continued.*

Description.	C. Yds.	Cost.	Amount.	Total.
Norman's Rapids.		$ cts.	$	
Rock excavation	24,300	1 50	36,500	
Embankment	8,000	0 30	2,400	
1 lock, 24ft. lift			151,300	
2 pairs gates			15,000	
4 culvert gates			1,200	
Dams (⅛th Clarke)			30,000	
Coffer dams (Clarke)			2,000	238,400
Black's Falls.				
Rock excavation	19,000	1 50	28,500	
Embankment	8,000	0 30	2,400	
1 guard lock, 14 ft. lift			112,500	
2 pairs gates			11,000	
4 culvert gates			1,200	
Dams (⅛th Clarke)			30,000	
Waste weir			3,000	
Coffer dam			2,000	190,600
Chapeau, L'Islet and Culbute.				
Rock excavation	48,000	1 50	72,000	
" " and pumping	14,400	2 00	28,800	
Embankment (Clarke)			3,700	
2 locks, 12 ft. lift each			209,800	
4 pairs gates complete say			22,000	
8 culvert gates, say			2,400	
Dams and piers (Clark) }			22,000	
Timber, stone filling, &c }				
Coffer dam (Clarke) to be removed			17,000	
Waste weir (Clarke) masonry, &c.			2,500	380,200
Des Joachims.				
Rock excavation	53,000	1 50	79,500	
Embankment	66,500	0 50	33,250	
Removal of piers, &c., (Clarke)			1,000	
1 lock, 24 ft. lift			151,300	
1 lock, 19 ft. lift			131,800	
4 pairs gates say			28,000	
8 culvert gates			2,400	
Dams and cribs, &c. (Clarke) 44,500 }			48,000	
Add additional paving 3,500 }				
Coffer dams (Clarke) to be removed, say			7,000	
1 regulating weir and gates			12,000	494,200
McSorley's.				
Rock excavation	22,000	1 50	33,000	
Embankment	9,000	0 50	4,500	
1 lock, 17' ft. lift			123,900	
2 pairs gates			12,000	
4 culvert gates			1,200	
Dams and cribs (Clarke)			48,800	
Coffer dams to be removed (Clarke)			2,100	225,500
Rocher Capitaine.				
Rock excavation	139,000	1 25	173,800	
Embankment	16,000	0 50	8,000	
2 locks, 24 ft. lift			302,600	
4 pairs of gates			30,000	
8 culvert gates			2,400	
Dams and banks, &c. (Clarke)			134,000	650,800

SUMMARY of Estimates—*Continued.*

Description.	C. Yds.	Cost.	Amount.	Total.
		$ cts.	$	$
Deux Rivières.				
Rock excavation	37,000	1 25	46,300	
Earth "	50,000	0 25	12,500	
Embankment	26,000	0 25	6,500	
1 lock, 24 ft. lift $ 151,300				
1 " 12 ft. " 104,900				
1 " 13 ft. " 108,700				
				364,900
6 pairs lock gates			37,000	
12 culvert gates			3,600	
Additional concrete in foundation—				
2 locks on each			26,000	
Timber, &c., in do			8,000	
Dams, banks, &c. (Clarke)			100,500	
Coffer dams (Clarke)			7,000	
2 regulating weirs			24,000	
				636,300
Johnson's.				
Rock excavation	12,200	1 50	18,300	
Earth "	81,300	0 25	20,325	
Embankment	11,000	0 25	2,750	
1 lock, 12 ft. lift $ 104,900				
1 " 14 ft. " 112,500				
			217,400	
4 pairs gates			22,000	
8 culvert gates			2,400	
1 regulating weir			12,000	
Dams, banks, &c. $ 87,000 (Clarke)				
Add $\frac{1}{12}$ th 7,000				
			94,000	
Coffer dam (Clarke)			6,000	
				395,200
Plein Chants.				
Rock excavation	21,000	1 50	31,500	
Embankment	9,000	0 30	2,700	
1 lock, 24 ft. lift			151,300	
2 pairs of gates			15,000	
4 culvert "			1,200	
Dam, &c. (Clarke)			18,600	
Wall	950	5 00	4,800	
				225,100
De La Rose.				
Rock excavation	8,500	1 50	12,750	
Embankment	3,000	0 30	900	
1 lock, 16 ft. lift			120,100	
2 pairs gates			11,000	
4 culvert gates			1,200	
Dam (Clarke) $ 26,500				
Add $\frac{1}{12}$th raised 2 ft. 2,200			28,700	
				174,700
Paresseux Chute.				
Rock excavation	56,200	1 25	70,250	
Embankment	8,000	0 30	2,400	
1 lock, 24 ft. lift			151,300	
2 pairs gates			15,000	
4 culvert gates			1,200	
Dams (Clarke) $ 7,400				
Less $\frac{1}{12}$th 2 ft. lower 600				
$ 6,800				
Add 2 walls				
L 1				
Ea. 100′ x 11′ x $\frac{4+6}{2}$				
= 370 c. yds at $5.00 $ 1,800			8,600	
				248,800

Summary of Estimates—*Continued.*

Description.		C. Yds.	Cost.	Amount.	Total.
Petite Paresseux.			$ cts.	$	$
Rock excavation		23,900	1 25	29,600	
Embankment		6,000	0 30	1,800	
1 lock, 24 ft. lift				151,300	
2 pairs gates				15,000	
4 culvert gates				1,200	
Dam (Clarke)	$ 32,000				
Add wall 150 ft. x 20 ft. x 6½	3,600			35,600	
					234,500
Talon Chute.					
Rock excavation		36,800	1 25	46,000	
Embankment		20,000	0 30	6,000	
2 locks, 22 ft. lift each (combined)				287,000	
3 pairs gates				25,000	
6 culvert gates				1,800	
Dam (Clarke)				3,400	
					369,200
Talon Lake Rapids.					
Rock excavation		21,700	1 25	27,100	
Embankment		6,000	0 30	1,800	
1 guard lock, 6 ft. lift				82,400	
2 pairs gates				10,000	
4 culvert gates				1,200	
Dam (Clarke)				6,200	
					128,700
Talon Lake Narrows.					
Rock excavation		77,800	1 50	116,700	116,700
Chaudière Portage, French River.					
Rock excavation	49,000				
Add ¼ for 14 ft. nav'n	13,000	62,000	1 50	93,000	
Embankment		42,000	0 30	12,600	
1 lock, 24 ft. lift				151,300	
1 lock, 10 ft. lift				97,400	
4 gates				26,000	
8 culvert gates				2,400	
Dam (Clarke)				26,000	
					408,700
Rapid du Buisson.					
Rock excavation	10,400				
Add ¼ 14 ft. nav'n	2,600	13,000	1 50	19,500	
Embankment		3,000	0 30	900	
1 lock, 10 ft. lift				97,400	
2 pairs gates				11,000	
4 culvert gates				1,200	
Dams and piers				36,400	
					166,400
Rapid de Parisien.					
Rock excavation	8,000				
Add ¼ for 14 ft. nav'n	2,000	10,000	1 50	15,000	
Embankment		7,000	0 30	2,100	
1 lock, 10 ft. lift				97,000	
2 pairs gates				11,000	
4 culvert gates				1,200	
Dams and piers				15,700	
					142,000

SUMMARY of Estimates—*Concluded.*

Description.	C. Yds.	Cost.	Amount.	Total.
Grand Recollet Falls.		$ cts.	$	$
Rock excavation... 17,000				
Add ¼ for 14 ft. nav'n 4,200	21,200	1 50	31,800	
Embankment	5,000	0 30	1,500	
1 lock, 13 ft. lift			108,700	
2 pairs gates			11,000	
4 culvert gates			1,200	
Dams and piers			13,000	
Coffer dams			2,000	
				169,200
Les Petites Dalles.				
Rock excavation 19,300				
Add ¼ for 14 ft. nav'n 4,800	24,100	1 50	36,200	
1 lock, 14 ft. lift			112,500	
Embankment	3,000	0 30	900	
2 pairs gates			11,000	
4 culvert gates			1,200	
Dams and piers			12,000	
Coffer dams			7,100	
				180,900

HENRY A. F. MACLEOD.

SUMMIT LEVEL.

The following is a report and estimate of the cost of the summit section, between Lake Nipissing and Talon lake, made for the Montreal, Ottawa and Georgian Bay Canal Company, by me in the autumn of 1899 :—

OTTAWA, October 28, 1899.

Montreal, Ottawa and Georgian Bay Canal Company:

DEAR SIRS,—In accordance with your instructions of July 1, 1899, accompanied with a memorandum and profile, from Mr. Walter Shanly, C.E., I have to report that surveys have been made, under my direction, by two parties of engineers, of the summit section of the Georgian bay canal, extending from the easterly shore of Lake Nipissing to Lake Talon, a distance of 19·71 miles.

One of the parties, under Mr. Henry Carre, commenced operations on July 5 at Lake Nipissing and made surveys and explorations required from Lake Nipissing to the outlet of Turtle lake, a distance of 15·98 miles, besides explorations and surveys of harbours, finishing on October 9.

The other party, under Mr. H. G. Stanton, began on August 8, at the outlet of Turtle lake and made the surveys, &c., to deep water in Talon lake, a distance of 3·73 miles, besides explorations, finishing on October 7.

The nature of the surveys, and the information required to be ascertained by your instructions, were such as would enable contractors to make up tenders for the construction of the works, and you particularly required that the nature of the material to be excavated should be ascertained by borings made at as frequent intervals as necessary for the purpose. This involved *location*, as well as trial surveys.

The survey, suggested by Mr. Shanly's memorandum, was of a more preliminary character, and a system of borings was not anticipated.

His proposal, on which these surveys just made are based, is, to obtain the supply of 'feed water' for the proposed canal, eastward from the summit, from the water of Lake Nipissing, whose natural outlet is westward, through the French river to the Georgian bay, Lake Huron.

The actual summit-water of the route is Trout lake, 23 feet higher and four miles to the east of Lake Nipissing, and one of the sources of the Mattawa river, but Mr. Shanly says that its outflow is wholly inadequate to the requirements of the contemplated navigation, and this statement is doubtless correct.

The changed conditions of affairs on the shores of Lake Nipissing, the building of the Canadian Pacific Railway, and the settlements along the margin of the lake referred to in the memorandum, now prevent the raising of the waters of Lake Nipissing, as proposed in the original reports of Mr. Shanly and Mr. T. C. Clarke. Yet, I believe, that the waters might be maintained at mean summer level, three feet above low water, to the advantage of all concerned, on the shores of the lake, the improvement of the navigation of the lake, and the effecting of a very large saving in the cost of the canal works, provided that means be taken to prevent the high water in the early summer from rising above its ordinary high level mark.

This survey, however, is made to carry out Mr. Shanly's intention of not interfering in any way with the variations of the water level of Lake Nipissing.

To effect this, a channel will have to be cut through the summit ridges, at the same time lowering the waters of Trout and Turtle lakes, 23 and 22 feet respectively to the low water level of Lake Nipissing.

Mr. Shanly gives a general idea of the work to be encountered in making such a channel in a summary as follows :—

1st. Cutting through the summit ridge, Nipissing to Trout lake.

2nd. The cutting away of such obstruction to the needed depth of navigation, as may be found to exist in Trout and Turtle lakes.

3rd. Cutting through the rocky barrier, which forms the Turtle rapids, dividing Turtle lake from Lake Talon.

'The surveys will thus extend over a distance of about 21 miles.'

'In estimating quantities, the following dimensions to be used' :—

Bottom width of canal....	100 feet.
Slopes of cuttings (average)..	1 to 1 "
Canal bottom below low water in Lake Nipissing	11 "
" " " Trout lake	34 "

Mr. Shanly also gives a description of the probable materials to be excavated, and suggests the routes, via the 'Little Vase river' and also via the 'Ojibwaysippi' as the most suitable. After surveying and exploring these routes, and two other routes further west, that via Ojibwaysippi, except the first mile from Lake Nipissing, was selected as the most favourable. The Ojibwaysippi was also selected by Mr. T. C. Clarke, as mentioned in his report of January 2, 1860, page 21.

Mr. Shanly suggests, that all bench marks, of forty years ago, have of course disappeared, or been obliterated, but with the assistance of one of Mr. Shanly's camp plans a bench mark was discovered by Mr. Carre, on the shore of Trout lake, which enabled him to apply all the soundings marked on the plan to his own work.

The scale of navigation, proposed in the memorandum, is nine feet on the lock sills, at lowest stage of Nipissing water, and canal bottom two feet lower. Surveys and borings were made in compliance with this scale (9 feet) until August 19, when you instructed me to make the borings, &c., for 14 feet on the sill and canal bottom two feet lower, or 16 feet. This change made it necessary to bore a considerable part of the line over again, on account of the increased depth.

The width of 100 feet for the bottom of th canal has been adhered to in the estimates. The slopes in rock are estimated at ¼ to 1, except in places where the surface of the rock is below the new water level, where the slopes are to be 1 to 1.

A berm of 6 feet is made on the surface of the rock. Earth and other materials, except rock, *are estimated at slopes* of 2 to 1.

WATER SUPPLY.

The quantity of water obtainable at the summit level must be sufficient for the lockage of vessels, eastward to Ottawa river, and westward to the Georgian bay.

Mr. Shanly, in his report on the Ottawa and French river navigation project, of March 22, 1858, page 35, states, that an inexhaustible supply can be obtained from Lake Nipissing, for even setting aside the enormous storage capacity of its immense area (upwards of three hundred square miles) the accession of water which Lake Nipissing receives from its many tributaries is ample to guarantee a sufficiency for whatever drafts may be made upon it, for any possible purposes of lockage in the most distant future.

Mr. Clarke, in his report above quoted, page 23, says that 'the waters of Lake Nipissing are sufficient for any scale of navigation, and for all time to come.'

'The quantity of water found, by careful guaging, to be flowing in French river, at a low stage, was 9,500 cubic feet per second, or 820,800,000 cubic feet in 24 hours. Assuming the locks to be 250 feet by 50 feet by 12 feet, and that 50 lockages are made each way in 24 hours, it would require 15,000,000 cubic feet of water, or less than 1-50th part of the supply. The whole amount of water flowing is equivalent to 5,472 lockages each 24 hours. This at once sets at rest any idea of the necessity of a storage reservoir.'

GENERAL DESCRIPTION OF ROUTE, LAKE NIPISSING TO TROUT LAKE.

It is proposed to make the entrance of the canal from Lake Nipissing, near Rocky Point, half a mile north of the outlet of Ojibwaysippi, and to join the Ojibwaysippi line at about one mile out.

Surveys and borings were made for the entrance at Rocky Point, and at the mouth of Ojibwaysippi, and also of both lines to the junction.

The Rocky Point line is selected, because deep water in Lake Nipissing is reached in a shorter distance, the distance to the junction is also shorter by 900 feet. There is no rock excavation in this entrance, while there is a considerable amount in the Ojibwaysippi entrance, and the quantity of rock excavation in the Rocky Point line is less than in the other.

It is proposed to dredge out the entrance to a width of 400 feet. The length to deep water (16 feet at low water) is 1,850 feet. Entrance piers of cribwork will nearly surround this basin, founded on the bottom of the space dredge extending to low water, and surmounted by piers of concrete, 10 feet high. The estimated cost of this entrance, and of all other works, will be found in the Appendix C.

From zero to station 98, the line passes through low-lying marshy land, which can be dredged, occasionally, overlying hard granite rock, which will have to be excavated. At station 47, the Canadian Pacific Railway is crossed. Here a swing bridge, of 100 feet opening is proposed, the piers and abutments of concrete, founded on rock and coped with masonry, the superstructure of steel.

The roads at stations, 79 + 50, and station 151, are proposed to be diverted to a swing bridge, close to the lock, near station 100.

From station 98 to station 112 in lake No. 1, is a heavy rock cutting, in some places exceeding 40 feet in depth.

In this cutting it is proposed to build a guard lock and a regulating weir, with two sets of gates and sluices, so as to be able to control the high water in Lake Nipissing and Trout lake respectively. Itis quite likely that the waters in Trout lake and the other lakes to the east will rise more rapidly than Lake Nipissing, in the spring.

This lock is intended to be of the same general dimensions as those on the Soulanges canal, viz., length, 270 feet between the hollow quoins, 45 feet wide and 14 feet on the mitre sills. The walls to be of concrete to the 14 feet line, above this, concrete with masonry facing, and coping of masonry, entrance piers of cribwork and concrete, at each end are included. The regulating weir, of concrete, with masonry coping.

Lake No. 1 is the first of a chain of five lakes, which follow one another, with short intervening portages, until Trout lake is reached, at station 212. Of this lake, No. 1, about 500 feet of the bottom is below the proposed bottom of the canal. The cuttings approaching this where shallow are widened to a base of 150 feet.

In borings made in this lake, and in a large proportion of borings to the east of this, material, composed of compact gravel and boulders was encountered, through which it was impossible to bore with the appliances we had on hand, particulary so when making borings from rafts. The services of Mr. W. J. Ellard, of Ottawa, who is accustomed to making borings, were secured, and a large number of borings were made by him, but he also failed to penetrate this material. It has been returned as gravel and boulders, at a special price.

The cutting between lakes No. 1 and 2 is heavy, over 40 feet deep in some places.

No portion of the bottom of lakes 2, 3 and 4 is below the bottom of the canal, and the cuttings between them are heavy, exceeding 40 feet in depth in places.

The portage between lakes 4 and 5 is the summit portage, 1,500 feet long. This will be a heavy cutting, a large part will be rock, and over 40 feet deep in places. Rock appears on each side of the ravine, so that the slopes are not so wide as they would otherwise be on the remainder of the cutting. The material is put down as gravel and boulders, below the line of the borings made.

The bottom of lake No. 5 is generally above the proposed bottom of the canal, only a few places and for short distances is the bottom lower. The shallow cuttings in this lake are widened out to 150 feet, on a curve in the centre line.

The last portage cutting to deep water is Trout lake will be 2,300 feet long, and, generally, 42 feet deep. The greater part is put down as rock, and it is the largest rock cut on the western portion of the section. Deep water in Trout lake is reached at 1,100 feet from the shore.

CLEARING, FENCING, AND PUBLIC ROAD.

An estimate is made for clearing and fencing on the part of the line from Lake Nipissing to Trout lake. Also for a public road along the north side of the canal, near the top of the slopes, not on the tow-path level, as it is not considered necessary to form a tow-path.

RIGHT OF WAY.

From Lake Nipissing to lake No. 4, the right of way for 70 acres will probably cost $2,000. Beyond this to Lake Talon there is not likely to be any claim.

TROUT LAKE.

A line of soundings was taken along the most direct route through Trout lake, from deep water at the western entrance to a point near Camp island, at station 514, nearly 5½ miles, which showed a depth of from 70 to over 150 feet, or when the lake is reduced to low water level in Lake Nipissing, of from 45 feet to 125 feet. For over two miles no bottom was reached with 150 feet of sounding line. The outlines of the shores were approximately fixed, by triangulation and micrometer measurements.

From stations 514 to 531 the bottom of the lake rises above the bottom of the canal, except to the eastern end of this cutting, where the bottom is irregular. The excavation ranges from 10 to 20 feet deep. The material in this, and other cuttings under the waters of Trout lake, are returned as gravel and boulders.

For the next 4,000 feet the water is deep, being 20 to 40 feet below low water level in Lake Nipissing.

Another shoal is reached at station 570, which extends to station 612. This will be a large cutting, from 15 feet to 30 feet deep, and includes the shoal known as the 'Stepping Stones,' which were some feet above water when these soundings were made.

The lake is then deep, from 16 to 30 feet, for 2,500 feet, and the beginning of the entrance to the outlet of Trout lake is reached at station 637.

The outlet cutting extends from stations 637 to 662, and includes a rock cutting in the narrows between Trout lake and Turtle lake. The entrance extends 600 feet into Turtle lake.

Two lines were surveyed for this outlet, and the one more westerly, following an old channel, was selected, being the most economical and in the best alignment.

The gravel and boulders cutting will range from 10 to 30 feet deep, and the rock cutting from 30 to 60 feet, the deepest cut on the section, 900 feet long.

TURTLE LAKE.

The water continues deep for 3,600 feet from the outlet cutting of Trout lake, being from 17 to 25 feet below low water in Lake Nipissing.

From station 698 to station 719 the water is shoal, and a cutting will have to be made in gravel and boulders, ranging from 10 to 30 feet deep.

The water is still shoal from station 719 to 731, through the first narrows of Turtle lake. The cutting will be in rock, running from 20 to 50 feet deep.

From station 731 to 753 the water is shoal, except at two places, aggregating 500 feet where it is deeper than the bottom of the canal; the depth of the cutting is from 5 to 18 feet.

From station 753 to 759 the line passes through the second narrows of Turtle lake, and will be in rock cutting, ranging from 5 to 30 feet deep.

The water continues shoal from station 759 to 763, and the cutting will run from 3 to 16 feet in gravel and boulders.

From station 763 to the beginning of the outlet cutting at station 825 + 50, a distance of a mile and one-fifth, the lake widens out and the water is deep, from 16 to 90 feet under low water level in Lake Nipissing.

The western portion of the survey ends at 825 + 50, 15·98 miles from the entrance at Lake Nipissing.

TURTLE LAKE OUTLET.

The excavation for the outlet of Turtle lake commences at 850 feet out from the shore, and follows through a succession of rapids and lagoons until Big Whitefish lake is reached. The first division of the cutting extends from station 0 to 18, and is composed, as far as can be ascertained, of gravel and boulders. The depth of cutting ranges from 20 to 40 feet.

A timber dam has been built at the outlet of Turtle lake, by which the waters in Trout and Turtle lakes are sometimes raised five or more feet.

From station 18 to station 30 the cutting is made up of rock, gravel and boulders, and mud. The depth runs from 25 to 30 feet.

From station 30 to station 83 is a very large cutting of rock, covered with a few feet of mud, passing through Moose Pond Lagoon. The rock cutting is the largest on the Summit section, is a mile long and from 20 to 38 feet deep.

Two outlets of this lagoon were surveyed and the more southerly one is selected, being about 800 feet shorter, with a much better alignment than the other. Judging from the elevations, the quantities will also be less.

The water is deep in Big Whitefish lake, for 2,100 feet, the bottom being in part 34 feet under low water, Lake Nipissing.

The outlet cutting of this lake begins at section 104, and there is a continuous cutting of gravel and boulders, and mud to deep water in Falon lake, at station 124, ranging from 6 to 20 feet deep.

Falon lake is deeper than the bottom of the canal for 1,800 feet, the greatest depth being 11 feet lower.

At station 142 the outlet cutting of Falon lake begins, and there is a continuous cutting of earth and sand till deep water is reached in Talon lake, and the end of the Summit section, at station 197 + 20. This cutting passes through a level flat, formed by deposit from North river, which comes in from the north. The depth of the cutting is from 5 to 20 feet.

The waters of North river should not be permitted to enter the canal cutting, but should be diverted along the north edge of the flat, through an old channel, costing with some cribwork, about $4,500.

TALON LAKE.

The level of Talon lake, when the survey was made was only one foot three inches lower than low water in Lake Nipissing, caused by a timber dam at Talon Chute. This dam, when entirely closed, raises the water over five feet higher. It will be unnecessary to raise these waters as high as has been customary to raise them for some years back.

A line of soundings was taken through Lake Talon, and deep water was found for 8 miles. Beyond this, there are two shoals, a mile apart. At the lowest shoal, which is narrow and rocky and half a mile above Talon Chute, a dam, lock and, guard lock, should be built, to control the summit level, from Lake Nipissing eastward.

STONE PROTECTION.

The slopes of the canal will require to be protected with stone from Lake Nipissing to station 100, and from Falon lake to Talon lake. It is intended to excavate and fill the whole length of the slopes, with two feet of quarry stone. It is not considered necessary to protect the slopes in the gravel and boulder cuttings.

LOW WATER IN LAKE NIPISSING.

The Department of Public Works is building a wharf at North Bay, the plans of which refer to a bench mark, which is 3·73 feet above low water in Lake Nipissing, and which was verified by one of the contractors for the wharf last spring. The contractors are instructed by the department engineers to make use of this bench mark.

Low water mark was shown to me, also, at the mouth of the Wisawasa river, near Calendar, by Mr. Thomas Darling, agent for Mr. Booth, who has lived there for a number of years.

By taking simultaneous observations there, and at North Bay, this level of low water was found to be almost the same as that at North Bay.

Independent check levels were taken by both parties from the bench mark to Trout lake, and the levels were carried across Trout lake and Turtle lake by a series of simultaneous observations. From Turtle lake to Talon lake, levels were taken on the banks of the rapids and lakes.

PLANS, ETC.

The plans, profiles, and cross sections show the positions of the various cuttings and their extent, also the alignment of the centre line. To avoid heavy work, curves of 478 feet radius have been used in a few confined places.

COST.

The estimated cost of the section is $5,950,000, which includes 15 per cent for engineering, contingencies, &c.

APPENDIX A is a schedule of quantities of the various cuttings in the western portion of the Summit section.

APPENDIX B is a schedule of quantities of the eastern portion.

APPENDIX C is an estimate in detail of quantities and cost in the Summit section.

Should the bottom of the canal be raised 3 feet, to the average summer level, it would effect a saving of about $750,000.

I am, yours truly,

(Signed) HENRY A. F. MACLEOD,
M. Inst. C.E.

APPENDIX A.

WESTERN PORTION OF SUMMIT SECTION.

Lake Nipissing to Turtle Lake Outlet, 15·98 miles.

SCHEDULE OF QUANTITIES.

From Station to Station.	Earth, cubic yards.	Gravel and Boulders, cubic yards.	Rock, cubic yards.
Rocky Pt. Harbour, 0 + 00 to 18 west	260,870		
Station 0 + 00 to 40	440,000		
" 40 to 99 + 75	697,850		
	1,398,720		
Station 0 + 00 to 40			66,000
" 40 to 67			68,485
" 97 to 115			178,871
" 99 + 75 to 115	17,000	22,413	
" 115 to 140	76,000	8,926	152,936
" 140 to 154 + 35	86,830	44,561	61,050
" 154 + 35 to 180	129,872	213,219	38,209
" 180 to 200 + 75	69,388	163,071	131,057
" 200 + 65 to 223 + 70	3,866	50,221	204,215
Trout Lake.	382,956	502,411	900,823
Station 514 + 27 to 531 + 35		86,727	
" 570 + 00 to 612 + 00		485,840	
" 637 + 00 to 662 + 00		120,426	
" 652 + 70 to 662 + 00	(the divide)		85,812
Turtle Lake.		692,993	85,812
Station 698 + 00 to 719 + 50		167,394	
" 719 + 50 to 731 + 50			102,885
" 732 + 00 to 752 + 50		38,400	
" 753 + 00 to 758 + 50			44,915
" 759 + 00 to 763 + 00		18,861	
		224,655	147,800
Total rock			1,134,435
" gravel and boulders		1,420,059	
" earth	1,781,676		

(Signed) HENRY CARRE.
" HENRY A. F. MACLEOD.

APPENDIX B.

Eastern Portion of Summit Section.

Turtle Lake Outlet to Talon Lake, 3·73 Miles.

SCHEDULE OF QUANTITIES.

From Station to Station.	Earth, cubic yards.	Gravel and Boulders, cubic yards.	Rock, cubic yards.
0 . 00 to 19 + 00		301,705	
19 + 75 to 30 + 42		91,893	
16 + 98 to 23 + 04			34,770
16 + 98 to 30 + 42	56,821		
30 + 42 to 83 + 05	89,715		
30 + 42 to 82 + 04			563,924
104 + 52 to 109 + 82	10,311	22,261	
109 + 82 to 118 + 67		54,445	
118 + 67 to 121 + 71	2,680	6,308	
121 + 71 to 124 + 05	1,739		
	161,266		
142 + 48 to 171 + 85	190,301		
171 + 85 to 177 + 85	47,409		
177 + 85 to 197 + 20	85,873		
	323,583		
Total rock			598,694
" gravel and boulders		476,612	
" earth	484,849		

(Signed) H. G. STANTON.
" HENRY A. F. MACLEOD.

APPENDIX C.

SUMMIT SECTION.

ESTIMATE OF QUANTITIES AND COST.

Right of way, 70 acres	$ 2,000
Clearing 60 acres at $20	1,200
Fencing 52,400 feet at 6c	3,200
Public road, 4 miles at $6,000	24,000

Excavation.

Dredging, west	1,398,720	c. yds.	
" east	323,583	"	
	1,722,303	" at 15c.	258,345
Earth, west	382,956	c. yds.	
" east	161,266	"	
	544,222	" at 25c.	136,055
Gravel and boulders, west	1,420,059	"	
" " east	476,612	"	
	1,896,671	" at 80c.	1,517,337
Rock, west	1,134,435	"	
" east	598,694	"	
	1,733,129	" at $1.50	2,599,694
Stone protection, 120,000 c. yds. at $1			120,000
Guard lock (compound)—			
Concrete, 11,500 c. yds. at $6			69,000
Masonry, 1,610 c. yds. at $15			24,150
Cast-iron pipes, segments, dowels, mitre sills			5,600
4 pairs lock gates			28,000
Regulating Weir—			
Concrete, 336 c. yds. at $6			2,016
Masonry, 130 c. yds. at $15			1,950
8 sluice gates			2,000
C. P. Ry. Swing bridge—			
Concrete, 1,800 c. yds. at $6			10,800
Masonry, 100 c. yds. at $15			1,500
Superstructure			20,000
Public Road Swing Bridge—			
Pivot pier, &c			3,500
Superstructure			7,500
Nipissing Entrance Piers—			
Cribwork, 43,318 c. yds. at $3.50			151,613
Concrete superstructure, 14,951 c. yds. at $6			89,706
Stone in concrete, 4,676 c. yds. at $1.50			7,014
Mooring posts, fenders, &c			4,000
Guard Lock, Guide Piers—			
Cribwork, 8,300 cubic yards at $3.50			29,050
Concrete superstructure, 3,200 c. yds. at $6			19,200
Mooring posts and fenders			2,000
Beacon Cribs—			
Cribwork, 7,143 c. yds. at $3.50			25,000
North River Diversion			4,500
Add engineering, contingencies, &c			780,070
Total			$5,950,000

HENRY A. F. MACLEOD.

PROPOSED LOCKS BETWEEN MONTREAL AND GEORGIAN BAY.

Numbers on plan.	Names.
1	Saint Anne's
2 & 3	Carillon
4 to 8	Grenville
9 & 10	Ottawa
11	Little Chaudière
12	Britannia Bay
13 to 15	Chats
16	Cheneaux
17	Portage du Fort
18	Rocher Fendu chute (combined)
19 & 20	Long Rapids
21 & 22	La Fontaine
23	Normans
24	Blacks
25	Chapeau
26	L'Islet
27 & 28	Des Joachims
29	McSorley's
30 & 31	Rocher Capitaine
32 to 34	Deux Rivières
35 & 36	Johnsons
37	Plein chants
38	De la Rose
39	Paresseux Chute
40	Petit Paresseux
41 & 42	Talon Chute (combined)
43	Lake Talon
44	Summit
45 & 46	Chaudière Portage
47	Du Buisson
48	Du Parisien
50	Les Petites Dalles
50 Locks	

Locks requiring names : Nos. 3, 5, 6, 7, 8, 10, 11, 14, 15, 22, 28, 36.

PRECIS OF PROPOSED ROUTE FOLLOWED BY CANAL BETWEEN MONTREAL AND GEORGIAN BAY.

Lock No. 1	*Saint Annes.* Existing lock to be altered, 4 ft. lift. Possibly the railway bridge may have to be altered so as not to interfere with the new lock.
From lock No. 1 to lock No. 2	26½ miles of lake and river navigation, part of which will have to be improved.
Lock No. 2	*Carillon Canal.* Present lock to be altered. Lift 5 ft.
From lock No. 2 to lock No. 3	The canal will have to be deepened from present depth of 9 ft. to 14 ft. waterway.
Lock No. 3	Existing lock to be altered, lift 12 ft.
From lock No. 3 to lock No. 4	Distance about 6 miles ; about 3,000 ft. of this will have to be improved.

Lock No. 4	*Grenville Canal.* Present lock to be altered; lift varies from 0 ft. to 6 ft. according to state of river.
From lock No. 4 to lock No. 5	Passing Basin to be deepened. Distance between locks about 500 ft.
Lock No. 5	Present lock to be altered, lift from 14 to 18 ft.
From lock No. 5 to lock No. 6	Canal of 1 mile to be deepened and widened. South side to be strengthened by dry masonry walls.
Lock No. 6	Existing lock to be altered, lift 7 ft.
From lock No. 6 to lock No. 7	Canal 4 miles long to be deepened and widened, and two waste weirs rebuilt.
Lock No. 7	Present lock to be altered, lift 7 ft.
From lock No. 7 to lock No. 8	Canal of about 1 mile long to be widened and deepened.
Lock No. 8	Present lock to be altered. Lift varies from 0 ft. to 14 ft. according to the state of the river. This lock is the last on the Grenville canal to the end of which there is about 2,500 ft. of dry walls on each side. This length of canal will have to be widened and deepened; and rights of way will have to be bought. The Grenville and Carillon canals are through rock.
From lock No. 8 to lock No. 9	After leaving the Grenville canal there is river navigation for about 60 miles of which 5 will have to be improved by dredging.
Lock No. 9 and lock No. 10	*Ottawa.* Here the canal between Ottawa and Georgian Bay commences. Right of way will have to be bought, though there are leased government lands through which the canal might pass, and which might be obtained at less cost. Lock to be built with lift of 24 ft., leading into a passing basin 1,000 ft. long, and about 200 ft. wide, which leads into lock No. 10, with lift of 24 ft.
From lock No. 10 to lock No. 11	About ¼ mile of canal to be made through rock, and then 1¼ miles of river navigation all of which will have to be deepened by dredging. On this section a swing bridge will have to be erected for the C. P. R. crossing.
Lock No. 11	*Little Chaudiere.* Lock with lift of 12 ft.
From lock No. 11 to lock No. 12	After passing lock 11, a canal will have to be built 1 mile long on the river shore in order to drown the Rimaux Rapids of 3 ft. After this canal is left, deep water navigation exists for 2¾ miles.
Lock No. 12	*Brittannia Bay.* Lock with 12 ft. Half a mile of canal to be built from the upper end of this lock.

NOTE.—From lock 8 to lock 12 there are five different routes that are available in case of necessity. The above one is that selected by Clarke.

From lock No. 12 to lock No. 13	Navigation through Lake DesChenes for about 26½ miles. The average depth varies from 20 to 30 ft. but there are some portions of the channel which will have to be deepened.
Lock No. 13 and lock No. 14	*Chats.* Two locks each with a lift of 24 ft. and with a passing basin between.
From lock No. 14 to lock No. 15	River navigation for about 1¾ miles: the level of the water to be raised about 10 ft.
Lock No. 15	*Chats.* Lock with lift of 12 ft.
From lock No. 15 to lock No. 16	Navigation through Chats lake, deep water. Distance about 23 miles to lock 16.
Lock No. 16	*Chenneaux.* Lock with 6 ft. lift. Dam also to be built.
From lock No. 16 to lock No. 17	About 5 miles of navigation through the head of the lake.
Lock No. 17	*Portage du Fort.* Lock with lift of 24 ft. built on an island, rock excavation. Dam to be built.
From lock No. 17 to lock No. 18	River navigation for about 7½ miles, deep water.
Lock No. 18	*Rocher Fendu.* Lock of 18 ft. lift with dam. Rock excavation.
From lock No. 18 to lock No. 19	River navigation for about 1½ miles.
Lock No. 19 and lock No. 20	*Long Rapids.* Combined locks, each with lift of 13 ft. with dam, excavation, and embankment.
From lock No. 20 to lock No. 21	River navigation for about 4½ miles.
Lock No. 21 and lock No. 22	*La Fontaine.* Two locks with lift of 12 ft. each, 550 ft. apart, and dam.
From lock No. 22 to lock No. 23	Distance about half a mile.
Lock No. 23	*Normans.* Lock of 24 ft. lift, with dam, and embankment.
From lock No. 23 to lock No. 24	Distance about three-quarters of a mile.
Lock No. 24	*Blacks.* Lock of 14 ft. lift, with dam, embankment and waste weir.
From lock No. 24 to lock No. 25	About 50 miles of river and lake navigation.
Lock No. 25	*Chapeau.* Lock of 12 ft. lift, with dam, embankment and waste wier.
From lock No. 25 to lock No. 26	About 5¾ miles of good river navigation.
Lock No. 26	*L'Islet.* Lock of 12 ft. lift, with dam, embankment and waste weir.
From lock No. 26 to lock No. 27	About 37 miles of navigation passing through the Upper Allumette lake, and Deep river.
Lock No. 27	*Des Joachims.* Lock of 24 ft. lift, with dam, embankment, and regulating weir.
From lock No. 27 to lock No. 28	Distance of 1,800 ft. arranged for a passing basin.

Lock No. 28	*Des Joachims.* Lock of 19 ft. lift, with dam and embankment.
From lock No. 28 to lock No. 29	River navigation for about 14 miles.
Lock No. 29	*McSorley's.* Lock of 17 ft. lift, with dam and embankments.
From lock No. 29 to lock No. 30	About 6 miles of river navigation.
Lock No. 30	*Rocher Capitaine.* Lock of 24 ft. lift, with dam, and embankment.
From lock No. 30 to lock No. 31	A distance of about 1,000 yards requiring improvement.
Lock No. 31	*Rocher Capitaine.* Lock of 24 ft. lift, with dam, and embankment.
From lock No. 31 to lock No. 32	A distance of about 14 miles through river.
Lock No. 32 and lock No. 33 and lock No. 34	*Deux Rivières.* Lock No. 32 has a lift of 24 ft. entered from a short canal, and leading into a passing basin; thence into lock 33 with a lift of 12 ft; from it into a second passing basin, and from that into lock 34 with a lift of 13 ft. Dams, embankment, and two regulating weirs also to be constructed.
From lock No. 34 to lock No. 35	About 18½ miles through the Ottawa river.
Lock No. 35	*Johnson's.* Lock of 12 ft. lift with embankment.
From lock No. 35 to lock No. 36	Distance about 1,900 ft. formed into a passing basin by means of an embankment along the north bank of the river.
Lock No. 36	*Johnson's.* Lock of 14 ft. lift, with dam, embankment, and regulating weir.
From lock No. 36 to lock No. 37	The Ottawa river turns to the north after lock 36 is passed, and the Mattawa river is followed for about 2¾ miles.
Lock No. 37	*Plein Chants.* Lock of 24 ft. lift, with dam and embankment.
From lock No. 37 to lock No. 38	A distance of about 6½ miles through the Mattawa river.
Lock No. 38	*De la Rose.* Lock of 16 ft. lift, with dam and embankment.
From lock No. 38 to lock No. 39	About 4 miles of river navigation.
Lock No. 39	*Paresseux Chute.* Lock of 24 ft. lift, with dams, embankment and walls.
From lock No. 39 to lock No. 40	A distance of about ¾ of a mile through the river.
Lock No. 40	*Petit Paresseux.* Lock of 24 ft. lift, with dam, embankment and wall.
From lock No. 40 to lock No. 41	A distance of about 1½ miles.
Lock No. 41 and lock No. 42	*Talon Chute.* Combined locks each with a lift of 22 ft. leading one into the other; with dam, and embankment. Both locks on the south side of the river.
From lock No. 42 to lock No. 43	A distance of about ½ a mile.

Lock No. 43	*Lake Talon.* A guard lock of 6 ft. lift, with dam and embankment. This lock is on the north side of the river.
From lock No. 43 to lock No. 44	This is the section which has lately been re-surveyed, and it forms the summit portion of the canal. It is about 26 miles in length, and passes through Lakes Talon, Turtle and Trout as well as through a chain of small lakes before lock No. 44 is reached. Rock excavation will have to be made at the Talon Lake Narrows, and some of the heaviest rock excavation on the whole route lies in this section.
Lock No. 44	*Summit.* A compound lock with a lift of 6 ft. arranged to overcome high water in Lakes Nipissing and Trout alternately.
From lock No. 44 to lock No. 45	Through Lake Nipissing, a distance of about 32 miles.
Lock No. 45 and lock No. 46	*Chaudière Portage.* Lock 45 has a lift of 24 ft. and leads into a passing basin, and from there into lock 46 with a lift of 10 ft. These two locks and basin are situated in a neck of land on the south side of the river cutting off a bend.
From lock No. 46 to lock No. 47	Through the French river, a distance of about 10 miles.
Lock No. 47	*Du Buisson.* Lock of 10 ft. lift, with dams and embankments.
From lock No. 47 to lock No. 48	A distance of about 3 miles.
Lock No. 48	*Du Parisien.* Lock of 10 ft. lift, with dam and embankments.
From lock No. 48 to lock No. 49	Distance about 16 miles through the broadest portion of the French river.
Lock No. 49	*Grand Recollet.* Lock of 13 ft. lift, with embankment and dams.
From lock No. 49 to lock No. 50	About 17 miles through the lower reaches of the French river.
Lock No. 50	*Les Petites Dalles.* Lock of 14 ft. lift, with dams and embankment. After passing this last lock there is a distance of about 2½ miles to the mouth of the French river in Georgian Bay.

NOTE.—All the locks are to have a standard length of 280 ft. between the quoins, with a width of 45 ft.

REPORT ON A 20-FEET NAVIGATION, MONTREAL TO GEORGIAN BAY.

OTTAWA RIVER SURVEYS.

OTTAWA, April 25, 1901.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,

DEAR SIR,—Since I gave you my report on the Ottawa river surveys, dated March 13 last, I beg to say that Mr. Stanton has extended the survey on the ice, up stream, from Black's Falls, in the Rocher Fendu channel, to a point near the mouth of the Coulonge river, and from the head of the Grand Calumet rapids, up the Calumet channel crossing the point of land from Grand Marais to the village of Coulonge, and closing on the point above mentioned near the Coulonge river.

The levels all around the Calumet island were closed and checked, but the sudden breaking up of the ice prevented him from closing the lower levels (Mr. Carre) with his own levels, at the foot of Paquette rapids.

Soundings and borings were made, and the material to be excavated was ascertained.

Mr. Stanton was engaged on this survey from March 14 to March 30.

I received instructions on March 21 to make estimates for 14 feet, and 20 feet navigation of the whole canal, from Georgian bay to Montreal. A copy of the estimate for 14 feet was sent in on March 21, and the estimate for 20 feet, has been in progress ever since.

I now beg to hand you a copy of the 20-feet estimate, amounting to $72,672,000 with details of the same.

The estimate was made in the first place on the same line as that for the 14-feet estimate, having some curves of 478 feet radius.

New lines have since been projected with curves of from 4,000 to 5,000 feet radius, at most of the places where the curves were sharp, and the estimate has been increased in consequence.

A large increase would also have to be made to the estimate for 14-feet navigation to flatten the curves.

There are still some places where there are sharper bends than 4,000 feet radius, but the water at these points is wide and deep.

From the Georgian bay to Lake Nipissing, the estimate is made upon the plans of lock sites, on the French river, made by Mr. Clarke, and upon Mr. Bender's plans of the channels, with soundings most of the way. There are, however, no levels given of some parts of the river banks and islands, which have to be widened and removed. The total length of these excavations is not great, so that they will not make a material difference in the estimate.

The summit section from Lake Nipissing to Talon lake is estimated from our plans made in 1899. A large increase has been made for curves of 5,000 feet radius, which extend beyond the limits of our levels. It is probable that a more economical line can be found by leaving lake No. 2 and following a chain of lakes to the north and east, and across a ridge to Trout lake. The flat curves make a considerable difference in the length of the canal, and will effect a large saving in quantities.

From the best information it was learned that the waters of Lake Nipissing are shoal for a distance of three miles from the canal entrance—soundings were taken for one mile out. An estimate is made to cover three miles.

From Lake Talon, down the Mattawan river, to the confluence of the Ottawa river, at Mattawa, the estimate is made from Mr. Clarke's plans of the lock sites, and from Mr. Shanly's plans, which give soundings in still water. The quantities are increased by improving the alignment, and some points and islands are crossed for which we have no levels.

From the mouth of the Mattawan river to a point about two miles below Fort William, on the upper Allumette lake, the estimate is made from Mr. Clarke's plans of the lock sites, and from Mr. Perry's plans with soundings, except in Deep river. At the foot of the DesJoachims rapids is the only place where a sharp bend occurs at the junction with Deep river, which here is over a quarter of a mile wide and 25 feet deep.

A better alignment may be had by following a chain of lakes and rejoining the Ottawa about three miles up stream.

From two miles below Fort William to the foot of the Paquette rapids, the plans for the Ottawa river surveys just made have been used. A line with curves of 5,000 feet radius has been projected and an estimate made upon it. The distance saved on this line is over 6,000 feet.

From the foot of the Paquette rapids to the head of the Calumet rapids the estimate has been made from Mr. Perry's plans and profiles, crossing the point of land from the village of Coulonge to the Grand Marais.

From the head of the Calumet rapids to the foot of the Sable rapids at the foot of Calumet island, the estimate is made from the surveys and plans just made for the Ottawa river surveys.

A line has been projected with curves of from 2,000 to 5,000 feet radius, the smaller occurring where the waters are wide and deep. The estimate is made on this line which is 2,400 feet shorter than the survey line. In some places the projected line is beyond the area levelled and cross sectioned.

From the foot of the Sable rapids to Britannia at the foot of Lake Deschenes, the estimate is made from Mr. Clarke's plans of the lock sites, and from Mr. Shanly's plans of the lakes and reaches, which give soundings in still water.

From Britannia to Ste. Anne, excluding the Grenville and Carillon canals, the plans and profiles made for the Ottawa river surveys, in 1899 and 1900, have been used when necessary, a line with curves of a mile radius has been projected on which the estimate is made.

For the Grenville, Carillon, Ste. Anne and Lachine canals it is proposed to execute new works parallel to the present lines. Estimates for these have been made from plans obtained from the Department of Railways and Canals. That for the Grenville canal was made by Mr. Carre, supplemented by information obtained from Mr. Stanton who has been for many years engaged on the construction of the Ottawa canals.

The estimates for the Carillon canal and the Ste. Anne lock and approaches were made by Mr. Stanton who also made the estimate for work to be done in Lake St. Louis, a chart of Lake St. Louis has just been received from the Hydrographic Office at Washington. The soundings given show that the estimate is approximately correct.

Mr. W. J. Crawford, who is familiar with the location has made the estimate for the Lachine canal.

The locks are intended to be 500 feet long between the quoins, 60 feet wide and 20 feet 6 inches on the sills.

Approximate estimates for a 24 feet lift lock and a 12 feet lift lock, with gates, were made by Mr. Crawford, who is also familiar with the work on the Sault Ste Marie canal, having been for several years engaged on its construction. The estimated cost for each of the locks is based upon these estimates.

The number of locks, not including the new proposed lock at the Montreal entrance of the Lachine canal, is 50, which number will probably be reduced, and the lifts increased thereby saving large quantities of excavation, though damaging land, which is not very valuable as a rule.

The size estimated for the prism of the canal, in the reaches is, base, 100 feet, increased occasionally on curves to 125 feet. Slopes in rock ¼ to 1, in earth 2 to 1, depth of water 22 feet.

As the levels of the various reaches have been but little altered, except where the late surveys have been made. Mr. Clarke's estimate for dams, coffer dams and weirs has only been changed in a few instances.

I am sorry that it has been impossible to properly finish the plans for the Ottawa river surveys, made last autumn and winter, in consequence of the amount of time occupied in making estimates for the 20 feet navigation.

The expense of additional assistance had to be deducted from the appropriation so that the balance available was expended on the 15th instant.

The plans and profiles are now sufficiently advanced to be readily understood. The following is a list of the same :—

Plans.

The Calumet channel, from Sable rapids to Bryson, scale 200 feet to an inch.

The Rocher Fendu channel, from Split Rock to Black's Falls, scale 200 feet to an inch.

Profile.

Sable rapids to Bryson, scales—hor., 200 feet ; ver., 20 feet.

Cross Sections.

Locks and dams, Calumet channel.
Locks and dams, Rocher Fendu channel.

Plans.

The Calumet channel—			
From Bryson to Coulonge	Scale	200′	to an inch.
The Allumette rapids—			
North channel	"	200′	"
The Paquette rapids—			
West or Log channel	"	200′	"
The Paquette rapids—			
East, or Timber channel	"	200′	"
The Allumette rapids—			
Hayley's bay and islands	"	200′	"
Calbute channel—			
From foot of Paquette rapids to the Pitawawie river	"	2,000′	"
Culbute channel—			
From Paquette rapids to Nicaban Pt..	"	200′	"
Culbute channel—			
From Nicaban Pt. to Poupore's bay..	"	200′	"
From Poupore's bay to head Allumette island	"	200′	"

Profiles.

Allumette rapids—				
The North channel..	Scales—Hor.	200′	Ver.	20′
Culbute channel—				
L'Islet to Deep river..	" "	200′	"	20′
Paquette rapids—				
The West or Log channel	" "	200′	"	20′
Culbute channel—				
Paquette rapids to L'Islet..	" "	200′	"	20′
Calumet channel—				
From Bryson to Coulonge..	" "	2,000′	"	20′

The following particulars are taken from Mr. Clarke's report of 1860.

Total length of navigation from Montreal to Georgian bay, 430 miles.

Ascent from Montreal to Lake Nipissing, 621·55 feet; descent from Lake Nipissing to Georgian bay, 60·30 feet.

I am, yours truly,

HENRY A. F. MACLEOD,
M. Inst. C. E.

ESTIMATES—MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Twenty feet Navigation, Georgian Bay to Montreal.

1. Summit level		$ 8,889,167
2. Excavation in reaches—		
a. Nipissing to Ste. Anne	2,710,837	
Increase, Fort Willian to Paquette Rds	311,000	
b. Ste. Anne to Montreal	2,186,100	
c. French River, and extra in Mattawan	2,430,834	
Increase in French river	421,500	8,060,271
3. Dams, coffer-dams and weirs—		
Whole length, Georgian Bay to Montreal		1,835,600
Locks, with gates, sluices and machinery—		
a. Georgian Bay to Ottawa	10,514,500	
Ottawa to Montreal	2,486,500	13,001,000
b. Addition, to make walls 10 ft. wide on top		495,000
c. Excavation in lock pits and approaches—		
Georgian Bay to Ottawa	4,105,000	
(Ottawa to Montreal is included in No. 5.)		
Increase, Ottawa to Deschenes	1,063,000	
" Sable to Bryson	387,400	5,555,400
d. Embankments for locks—		
Georgian Bay to Ottawa	608,100	
Ottawa to Montreal	132,400	740,500
e. Entrance guide piers—		
Georgian Bay to Ottawa		6,774,000
(Ottawa to Montreal is included in No. 5.)		
f. Electric plant, and power		2,650,000
5. Canals—		
a. Grenville	4,199,999	
b. Carillon	1,668,715	
c. Ste. Anne	330,250	
d. Lachine	4,181,000	10,379,964
6. Bridges—		
Georgian Bay to Ottawa		444,000
(Ottawa to Montreal is included in No. 5.)		
7. Add for engineering and contingencies		11,764,328
8. Land and damages—		
a. Georgian Bay to Ottawa	2,000,000	
b. Grenville Canal	12,770	
Carillon and Ste. Anne	Nil.	
c. Lachine canal	25,000	2,037,770
		$ 72,627,000

HENRY A. F. MACLEOD.

OTTAWA, April 25, 1901.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Summit Section.—Summary of Excavation.

Description.	Quantity.	Unit.	Rate.	Cost.
	Cubic Yds.	Cubic Yds.	$ cts.	$
Dredging (West)	1,782,678	2,300,590	0 15	345,088
" (East)	517,912			
Earth (West)	401,819	593,736	0 25	148,434
" (East)	191,917			
Gravel and boulders (West)	2,077,200	2,729,176	0 80	2,183,341
" (East)	651,976			
Rock (West)	1,560,843	2,293,092	1 50	3,439,638
" (East)	732,249			
Excess of cost of new line to Trout lake				2,164,437
Add 25 p.c. of excavation on curves of 1 mile rad., 25 p.c. of $2,432,917				608,229
				8,889,167

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Excavation in Reaches 22 feet, Ste. Anne to Nipissing.

Locality.	Quantity.	Rate.	Cost.
	Cubic Yds.	$ cts.	$
Ste. Anne to Ottawa, rock	50,000	1 00	50,000
" " earth	3,048,000	0 15	457,200
Lake Deschenes, 2,600 ft. x 15 ft. deep, rock	150,000	1 00	150,000
Portage du Fort to Bryson, rock	158,000	1 00	158,000
" " earth	62,000	0 15	9,300
Bryson to Coulonge river, rock	95,000	1 00	95,000
" " earth	3,066,000	0 15	459,900
Paquette rapids to Fort William, rock	612,200	1 50	918,300
" " earth	1,535,000	0 15	230,250
Talon lake, rock	134,200	1 50	201,300
Lake Nipissing 3 ms. 6 ft. deep, earth	394,000	0 15	59,100
			2,788,350
Deduct Portage du Fort to Bryson, new line			77,513
			2,710,837
Add, increase Fort William to Paquette rapids			311,000
" increase in French river			421,500

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Lake St. Louis.—Earth and Rock Excavation from Ste. Anne to Lachine.—Approximate Estimate.

Description.	Quantity.	Rate.	Cost.
	Cubic Yds.	$ cts.	$
Rock excavation	1,403,700	1 50	2,105,550
Earth excavation	537,000	0 15	80,550
Total			2,186,100

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Excavation Reaches.—French river, and extra in Mattawan river.

French river	$1,069,277
Mattawan river	727,777
	$1,797,054
Add increase—	
Above de La Rose and Plein Chants	633,780
	$2,430,834

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Dams, Coffer Dams and Weirs.

Ottawa to Deschenes	$503,000
Chats	163,000
Cheneaux	21,500
Portage du Fort	79,200
Sable	106,900
Mountain	31,400
Calumet, 3 dams	176,000
Chapeau and L'Islet	41,500
Des Joachims	67,000
McSorleys	50,900
Rocher Capitaine	134,000
Deux Rivières	131,100
Johnson's	112,000
Plein Chants	23,400
De La Rose	28,700
Paresseux Chute	8,600
Petit Paresseux	35,600
Talon Chute	3,400
Talon Lake	6,200
Chaudiere Portage	26,000
Rapide du Buisson	36,400
Rapide do Parisien	15,700
Grand Recollet	15,000
Les Petites Dalles	19,100
Dams and coffer dams, &c	$1,835,600

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Estimate for Locks.

No.	Name.	Lift.		Cost (Including Gates).	Remarks.
	From Montreal to Ottawa.	Ft.	In.	$	
1*a*	Montreal entrance	12	3	...	Under Dominion Govt. contract.
2*a*		18	2	226,600	
3*a*	St. Gabriel	8	10	180,600	
4*a*	Cote St. Paul	7	4	173,600	
5*a*	Lachine entrance	3	5	212,300	
1	Ste. Anne	3		22,000	
2	Carillon	16		244,400	
3	"	4		277,100	
4	Greeces' Point	17		253,200	
5		16		244,400	
6		8		173,600	
7	Grenville	19		278,700	To high water at low water, nil.
8		...		...	Lock No. 8 not required.
	From Montreal to Georgian Bay.				
9	Ottawa	25		324,400	
10	"	25		328,100	
11	Little Chaudière	19		273,700	
12	Britannia Bay	18		265,300	
13	Chats	24		315,000	
14	"	24		317,500	
15	Chats lake	12		211,000	
16	Cheneaux	11		203,100	
17	Portage du Fort	24		317,500	
18	Sable	8		173,600	
19	Mountain rapids	15		235,600	
20	Grand Calumet	24		315,000	
21	"	24		315,000	
22	"	24		317,500	
23	Chapeau	15		235,600	
24	L'Islet	17		257,000	
25	Des Joachims	24		315,000	
26	"	19		273,300	
27	McSorley's	17		256,100	
28	Rocher Capitaine	24		317,500	
29	"	24		317,500	
30	Deux Rivières	24		315,000	
31	"	12		209,000	
32	"	13		220,300	
33	Johnson's	12		209,000	
34	"	14		229,100	
35	Plein Chants	24		315,000	
36	De la Rose	16		244,400	
37	Paresseux Chute	24		315,000	
38	Petite Paresseux	24		315,000	
39	Talon Chute	22		306,600	
40	"	22		273,200	
41	Talon lake	6		158,500	
42	Summit	6		232,000	
43	Chaudière Portage	21		291,900	
44	Du Buisson	16		246,900	
45	De Parissien	14		229,100	
46	Grand Recollet	17		255,700	
47	Les Petites Dalles,	18		264,500	
				13,001,000	

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Add increase lock walls, from 5 feet to 10 feet on top.

Add 1,650 cubic yards concrete at $6 to each lock=9,900 each x 50 locks.... $495,000

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Estimate of Quantities in Lock Pits and Approaches for 20 foot Navigation 22 feet on Reaches.

Number.	Locality.		Quantity.	Rate.	Cost.
			Cubic Yds.	$ cts.	$
9, 10, 11, 12	Ottawa to Lake Deschene	Rock.	777,942	1 25	972,427
13, 14, 15	Chats	Earth.	156,000	0 25	39,000
	″	Rock.	481,750	1 00	481,750
16	Cheneaux	″	56,000	1 50	84,000
17	Portage du Fort	″	151,200	1 25	189,000
18	Sable	″	43,681	1 00	43,681
19	Mountain	″	24,266	1 00	24,266
20, 21, 22	Grand Calumet	″	150,875	1 00	150,875
23, 24	Chapeau and L'Islet	″	85,660	1 50	128,490
25, 26	Des Joachims	″	132,340	1 50	198,510
27	McSorley's	″	57,100	1 50	85,650
28. 29	Rocher Cap taine	″	251,140	1 25	313,925
30, 31, 32	Deux Rivières	″	177,130	1 25	221,412
33, 34	Johnson's	″	156,750	1 50	235.125
	″	Earth.	94,000	0 25	23,500
35	Plein Chant	Rock.	47,250	1 50	70,875
36	De la Rose	″	22,580	1 50	33,870
37	Parisseux Chute	″	68,330	1 25	85,412
38	Petite Parisseux	″	105,261	1 25	131,576
39, 40	Talon Chute	″	77,590	1 25	96,987
41	Talon lake	″	38,060	1 25	47,575
42	Summit, included in summit estimate		....	....	....
43	Chaudière Portage	Rock.	161,340	1 50	242,010
44	Du Buisson	″	37,750	1 50	56,625
45	Parisien	″	31,290	1 50	46,935
46	Grand Recollet	″	43,140	1 50	64,710
47	Les Petite Dalles	″	24,100	1 50	36,150
	Total in lock, pits and approaches—say $4,105,000		....	....	4,104,336
	Add, increase in cost on new line Ottawa to Deschenes		....	....	1,063,000
	Add, increase in cost on Sable to Bryson, new line		....	....	387,400
					5,555,400

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Estimate for Embankment around Locks from Montreal to Georgian Bay.

No.	Lift.	Cubic Yds. Embankments.
1		
2		
3		
4		
5		
6		
7		
8		
9	25	40,800
10	25	40,800
11	19	31,900
12	18	30,400
13	24	39,300
14	24	39,300
15	12	21,500
16	11	20,100
17	24	39,300
18	8	15,600
19	15	26,000
20	24	39,300
21	24	39,300
22	24	39,300
23	15	26,000
24	17	29,000
25	24	39,300
26	19	31,900
Carried forward		589,100
Brought forward		589,100
27	17	29,000
28	24	39,300
29	24	39,300
30	24	39,300
31	12	21,500
32	13	23,000
33	12	21,500
34	14	24,500
35	24	39,300
36	16	27,500
37	24	39,300
38	24	39,300
39	22	36,400
40	22	36,400
41	6	12,600
42	6	12,600
43	21	34,900
44	16	27,500
45	14	24,500
46	17	29,000
47	18	30,400
Embankment		1,216,200
" at 50c		$ 608,100
Locks 1a to 8, page 2		132,400
Total embankment around locks		$ 740,500

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Estimate for Embankment around Locks from Montreal to Ottawa.

—	No.	Lift. Ft.	Lift. In.	Cubic Yds. Embankments.
Lachine canal, under contract	1a	12	3	
"	2a	14	0	24,468
" St. Gabriels	3a	9	0	17,048
" Cote St. Paul	4a	8	0	15,564
" Lachine entrance	5a	12	0	21,500
Ste. Anne	1	13	0	22,984
Carillon	2	16	0	27,436
"	3	19	0	31,888
Grenville canal, Greeces' Point	4	17	0	28,920
"	5	16	0	27,436
"	6	8	0	15,564
"	7	19	0	31,888
No. 8 lock, not wanted	.....	.....	.....	
				264,696
264,696 cubic yds at 50c	.....	.....	.....	$ 132,348

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Entrance Guide Piers.—Ottawa to Georgian Bay.

Name.	Nos.	Length.	Breadth.	Height.	Cubic Yards.
Chaudière	1	600	20	30	13,320
Mechanicsville	4	"	"	30	53,332
Britannia	4	"	"	40	71,112
Chats	8	"	"	36	133,336
Cheneaux	4	"	"	30	53,332
Portage du Fort	4	"	"	"	53,332
Sable	4	"	"	"	53,332
Mountain	4	"	"	"	53,332
Grand Calumet	12	"	"	"	159,996
Chapeau	4	"	"	"	53,332
L'Islet	4	"	"	"	53,332
Des Joachims	4	"	"	"	53.332
McSorley's	4	"	"	"	53,332
Rocher Capitaine	8	"	"	.	106,664
Deux Rivières	4	"	"	"	53,332
Johnson's	4	"	"	"	53,332
Plein Chants	4	"	"	"	53,332
De la Rose	4	"	"	"	53,332
Paresseux Chute	8	"	"	40	142,224
Talon Lake and Chute	8	"	"	30	106,664
Chaudière	4	"	"	"	53,332
La Petite Dalles	4	"	"	"	53,332
Grand Recollet	4	"	"	"	53,332
Rapide du Buisson	4	"	"	"	53,332
Rapide de Parisien	4	"	"	"	53,332
					1,693,292

1,693,292 at $4 00 = $6,773,168 Total cost.
Say,— 6,774,000 "

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Estimate for Electric Plant and Power for Locks.

Lachine canal, 5 locks, less 1 to be built by Government	4 locks.
St. Anne	1 "
Carillon	2 "
Grenville	4 "
Ottawa to Georgian Bay	39 "
	50 locks.

Memo: The cost of the electric plant at the Sault Ste. Marie canal is $53,000.
$53,000 x 50 locks = $2.650,000.

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Grenville Canal.

Items.	Quantities.	Unit.	Rate.	Cost.
			$ cts.	$
Total rock excavation (dry)	2,337,709	C. yds.	1 00	2,337,709
" " " (under water)	174,554	"	1 50	261,831
Total earth excavation in prism	1,792,674	"	0 25	448,169
Waste water ditches	7.407	"	0 25	1,852
				3,049,561
Bridges.				
Stone coping of swing pier	29	"	16 00	464
Concrete in piers and abutments	5,227	"	6 00	31,362
Superstructure in two railway bridges				34,000
" " road bridges				16,000
				81,826
Guide piers.				
Cribwork 16=600 ft. x 20 ft. x 25 ft.	177,778	C. yds.	4 00	711,112
" 4=600 ft. x 20 ft. x 45 ft.	80,000	"	4 00	320,000
				1,031,112
4 regulating weirs				6,000
Stone protection	31,500	C. yds.	1 00	31,500
				37,500
Total cost				4,199,999

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Carillon Canal.—Summary of Approximate Quantities of Earth and Rock Excavation in Carillon Canal.

———	Rock in Canal.		Earth in Canal.		Cost.
	C. yds.	$ cts.	C. yds.	cts.	$
			109,976	15	16,496
	1,097,894	1 00			1,097,894
Chute à Blondeau	192,592	1 50			288,888
Water tight embankment	11,250	0 75			8,437
Guide piers above and below the lock	58,000	4 00			232,000
Unwatering canal and lock pits					25,000
Total					1,668,715

HENRY A. F. MACLEOD.

H. G. STANTON.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Ste. Anne's Lock.—Approximate Estimate.

Description.	C. yds.	Price.	Total.	Remarks.
		$ cts.	$	
Dredging temporary channel	13,000	1 25	16,250	
Rock excavation	34,000	1 00	34,000	
C. P. Railway pier			8,000	Single track.
G. T. Railway pier			12,000	Double track.
C. P. Railway swing bridge			100,000	Single track.
G. T. Railway swing bridge			130,000	Double track.
Coffer dam			10,000	
Unwatering lock pit			20,000	
Total			330,250	

HENRY A. F. MACLEOD.

H. G. STANTON.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Approximate Estimate for 20 feet Navigation at Lachine Canal.—Being practically a new Canal 100 feet wide at bottom with earth slopes 2 to 1, on North Side of and parallel to present Canal.

Description.	C. yds.	Quantity.	Price.	Amount.
			$ cts.	$
From upper end lock No. 1 to Wellington Basin	29,444			
Add, say 10 per cent	3,556			
Rock excavation		33,000	1 50	49,500
Wellington Basin to Lachine—				
Rock excavation	1,494,667			
Add, say 10 per cent	155,333			
		1,650,000	1 50	2,475,000
Add, clay and earth	942,614			
Add, say 10 per cent	97,386			
		1,040,000	0 25	260,000
Add, bog	350,051			
Add, say 10 per cent	35,949			
		386,000	0 25	96,500
Excavating upper entrance channel—				
Inside piers, 100 ft. ch. slopes, 2 to 1	267,289			
Outside of piers, 250 ft. wide	184,800			
	452,089			
Add, say 10 per cent	46,911			
		499,000	1 50	748,500
Removing lock walls, piers, &c		60,000	1 50	90,000
Excavation for culverts, earth		4,608	0 25	1,152
" " rock		5,074	1 50	7,611
Stone lining of banks, including excavation		64,000	1 25	80,000
G.T.R. swing bridge superstructure				15,000
6 road bridges superstructure			7,000 00	42,000
Masonry for culverts		1,570	12 00	18,840
" swing bridges		7,000	12 00	84,000
Waste weir at Côte St. Paul				10,000
Fencing	Miles.	6	500 00	3,000
Right of way	Acres.	80	100 00	8,000
Removing houses	No.	34	500 00	17,000
Guide piers for 4 locks	C. yds.	50,000	4 00	200,000
				4,206,103
Less, Rt. of w. and houses—a and b				25,103
				4,181,000

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Bridges.—Ottawa and Georgian Bay.

Interprovincial Bridge, Ottawa	$100,000
Main Street, Ottawa	12,000
C. P. R. Bridge, Ottawa	46,000
Portage du Fort	50,000
Bryson	40,000
Fort Coulonge	30,000
Chapeau	12,000
Des Joachims	40,000
C. P. Ry. Mattawa to be raised	50,000
Mattawa Public Road	20,000
Summit Public Road	11,000
C. P. Ry. Summit Section	33,000
	$444,000

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Grenville Canal.—Right of Way.

Station to Station.		Dimensions.	Acres.	Rate.	Cost.	Remarks.
				$ cts	$ cts.	
0	30	3,000 × 80	5·5	100 00	550 00	
20	68	3,800 × 80	7·0	30 00	210 00	
68	75	700 × 80	....	....	*10,000 00	*Stonefield Village.
75	215	14,000 × 80	25·5	30 00	765 00	
215	315	10,000 × 180	41·5	30 00	1,245 00	
....	....	....	....	....	12,770 00	

NOTE.—Government land excluded.

HENRY A. F. MACLEOD.

MONTREAL, OTTAWA AND GEORGIAN BAY CANAL.

Lachine Canal.

80 acres at $100	$ 8,000
Moving 34 houses at $500	17,000
	$25,000

HENRY A. F. MACLEOD.

REPORT

OF THE

SECRETARY OF THE RAILWAY COMMITTEE

OF THE

PRIVY COUNCIL

RAILWAY COMMITTEE OF THE PRIVY COUNCIL.

The Honourable the Minister of Railways and Canals being the chairman of the Railway Committee of the Privy Council, on which certain extensive duties are imposed by the Railway Act, 1888, and its amendments, it seems proper that a brief record should here be made of the matters submitted to the committee during the period from October 1, 1900, to October 1, 1901, and the decisions arrived at, they are as follows :—

1. Application of the Kingston, Napanee and Western Railway Company, for the permission to cross the Canadian Pacific Railway, at rail level, at Tweed.—Under consideration.

2. Petition of the county of Frontenac, asking that the Grand Trunk Railway Company be compelled to place protection at the crossings at Cataraqui and Perth roads and at the Outer station, Kingston.—Under consideration.

3. Application of the corporation of the city of Toronto, for an order directing that gates and watchmen be placed at the crossing of Dunn avenue, by the Grand Trunk Railway, Toronto—Interim order granted.

4. Application of the corporation of the city of Toronto, for an order directing that gates and watchman be placed at the crossing of Cherry street by the Grand Trunk Railway, Toronto.—Under consideration.

5. Application of the corporation of the city of Toronto, for an order directing that gates and watchmen be placed at the crossing of Dowling avenue, by the Grand Trunk Railway, Toronto.—Interim order granted.

6. Application of the corporation of the city of Toronto, for an order directing that gates and watchmen be placed at the crossing of Jamieson avenue, by the Grand Trunk Railway, Toronto.—Under consideration.

7. Application of the corporation of the city of St. Henri, *re* opening of Gareau street across the tracks of the Grand Trunk Railway.—Under consideration.

8. Application of the corporation of the town of Galt for permission to make a highway crossing over the track of the Canadian Pacific Railway at Myrtle avenue.—Under consideration.

9. Application of the Winnipeg Street Railway Company, for permission to cross, at rail level, the Canadian Pacific Railway at Main street and Higgins avenue, in the city of Winnipeg.—Under consideraton.

10. Petition of the Toronto, Hamilton and Buffalo Railway Company, asking that Order No. 7447, *re* highway crossing at Station 100 + 12, be rescinded, and that the matter be reconsidered.—Under consideration.

11. *Re* protection to be provided at the crossing of the Intercolonial Railway by the St. John Electric Street Railway, in St. John, N.B.—Under consideration.

12. Application of the Central Ontario Railway Company for permission to remove the packing from the frogs and wing rails from the month of December to the month of April of each year, both months inclusive.—Under consideration.

13. Petition from the parish of St. Jerusalem d'Argenteuil, asking that the Great Northern Railway Company be compelled to provide gates and watchmen at the proposed crossing of the front road on south side of the North river, near Lachute.—Under consideration.

14. Application of the corporation of the city of Toronto for an order authorizing the construction and maintenance of a street by means of an overhead bridge at York street, Toronto, cross the tracks of the Grand Trunk and Canadian Pacific Railway Companies.

15. Complaint of the Municipal Council of the village of Lennoxville that the Canadian Pacific Railway Company have laid a new siding across College street, which is already crossed by tracks of the Grand Trunk, Canadian Pacific and Boston and Maine Railways, and asks the committee to prevent sidings being laid across this street or to compel the railway companies to adopt measures of protection to the public.—Arranged by parties interested.

16. Application of the Corporation of the city of Fredericton for permission to extend Church street across the Canada Eastern and the Canadian Pacific Railways.—Under consideration.

17. Application of the Niagara, St. Catharines and Toronto Railway Company, for permission to intersect and unite with the Wabash Company's line, which the latter have leased from the Grand Trunk Railway Company.—Application postponed.

18. Petitions from the Municipal Councils of the county of Peterborough and the township of Woodhouse, South Norfolk and others, asking that the various railway companies be compelled to observe the Railway Act, by building cattle guards that will effectually safeguard the interests of the farmers and the travelling public.—Under consideration.

19. Application of the Canadian Pacific Railway Company, for permission to run a track along Wolfe street, Peterborough, also to cross three other tracks on the said street, and to divert a portion of the street, the said siding to extend easterly across George street.—Granted.

20. Application of the Toronto, Grey and Bruce Railway Company (C.P. Ry.), for permission to build a branch line from a point on their line near Queen's wharf, Toronto, to a point on the south limit of Fraser avenue.—Withdrawn.

21. Application of the township of Nepean, the Corporation of the county of Carleton and the Corporation of the City of Ottawa, for an order directing that a subway or overhead crossing be constructed under or over the tracks of the Canadian Pacific and Canada Atlantic Railways, on Wellington street (commonly known as Richmond road), in the city of Ottawa. Order issued directing that until further or other order be made in the premises, the Canada Atlantic Railway Company shall place and maintain gates at its crossing, and the Canadian Pacific Railway Company shall place and maintin two extra pairs of gates at its crossings in addition to the present gates maintained by that company at the place aforesaid.

22. Application of the Rutland and Noyan Railway Company for approval of plan showing slight change in the crossing of the Canada Atlantic Railway by its railway at Noyan junction, and that the said plan be substituted for the plan already approved of.—Approved.

23. Application of the South Shore Railway Company, for approval of the plan and proposed site of a bridge to be built by that company across the St. Francis river at St. Francis, P.Q.—Approved.

24. Application of the Hamilton Radial Electric Railway Company, for approval of the plan and proposed site of a bridge to be built by that company across the Grand river at Freeport, Ontario.—Approved.

25. Application of the Montreal Street Railway Company, for permission to cross with its railway the tracks of the Montreal Terminal Railway Company, on Valois avenue, Montreal and La Salle avenue, Maisonneuve.—Granted.

26. Complaint of the Yarmouth Steamship Company against the Dominion Atlantic Railway Company, *re* unjust discrimination in rates by the Dominion Atlantic Railway Company, in favour of their own steamers, and also in the connection of the trains with the Yarmouth Steamship Company's boats.—Under consideration.

27. Application of the Grand Trunk Railway Company for permission to construct a branch or siding along Charles street, in the town of Berlin.—Granted.

28. Complaint that the crossings of the Grand Trunk Railway on Wentworth street, Victoria avenue and Wellington street, in the city of Hamilton, are dangerous, and should be protected by gates and watchmen.—Under consideration.

29. Application of the Corporation of the town of Peterborough, for an order directing that gates and watchmen be established by the Grand Trunk Railway Company at its crossings on Charlotte and Simcoe streets in the said town.—Granted.

30. Application of the Pontiac Pacific Junction Railway Company for approval of plan and profile of proposed overhead crossings of Alma, Inkerman, Britannia, Allison, Kent and Lake streets, in the city of Hull.—Approved.

31. Application of the Canada Atlantic Railway Company, for permission to cross Bridge street and the tracks of the Ottawa Electric Railway Company thereon, in the city of Ottawa.—Granted.

32. Application of the Great Northern Railway Company, for approval of change in the location of its main line at Grand Mere, in the province of Quebec, as shown on plan, profile and book of reference submitted.—Approved.

33. Application of the Ottawa and Gatineau Valley Railway Company, for approval of change in the location of its line north of the city of Hull to the intersection with the Interprovincial bridge approach, near Lake Flora, as shown on plan, profile and book of reference submitted.—Approved.

34. Application of the Chateauguay and Northern Railway Company, for approval of plan and proposed site of bridge across the Rivière des Prairies, at Charlemange, in the province of Quebec.—Approved.

35. Application of the Canadian Pacific Railway Company, for approval of plan and proposed site of a bridge across the Red river at Winnipeg.—Approved.

36. Application of the Canadian Pacific Railway Company, for approval of change in the location of its line approaching on each side of the proposed bridge across the Red river at Winnipeg.—Aproved.

37. Application of the Canadian Pacific Railway Company, for approval of change in the location of its line between Field and Ottertail, in the province of British Columbia, shown on plan, profile and book of reference submitted.—Approved.

38. Application of the Grand Trunk Railway Company, for permission to build a branch line from Brookholme station, county of Grey, to the works of the Grey and Bruce Portland Cement Company, of Shallow lake, and crossing Eyre street, Kempt street and Raglan street, in town plot of Brook and township of Sarawok.—Granted.

39. Application of the Grand Trunk Railway Company, for permission to build a branch line from Port Credit to the works of the St. Lawrence Starch Company.—Granted.

40. Application of the Ottawa and Gatineau Valley Railway Company, for approval of plans and profiles of its crossings of St. Florent, St. Henri, St. Hyacinthe, Chaudière, Brigham and Leamay streets, in the city of Hull.—Approved.

41. Application of the Ottawa and Gatineau Railway Company, for approval of plan and profile of its under crossing of the Canadian Pacific Railway at Gatineau junction.—Approved.

43. Application of the Ottawa and Gatineau and the Pontiac Pacific Junction Railway Companies, for approval of plan and profile of overhead crossing of Laurier avenue and the track of the Hull Electric Railway Company thereon, in the city of Hull.—Approved.

44. Application of the Ottawa and Gatineau and the Pontiac Pacific Junction Railway Companies, for approval of plans and profiles of proposed under crossings of Dufferin bridge, on Wellington street, and Sappers bridge, on Sparks street, in the city of Ottawa.—Approved.

45. Application of the Ottawa and Gatineau and the Pontiac Pacific Junction Railway Companies, for approval of plans and profiles of under crossings of highways at Station 72, south approach to the Interprovincial bridge, in the city of Ottawa.—Approved.

46. Application of the Ottawa and Gatineau and the Pontiac Pacific Junction Railway Companies, for approval of plan and profile of under crossing of highway at or near Hull, approach to the Interprovincial bridge, in the city of Hull.—Approved.

47. Application of the Grand Trunk Railway Company, for approval of plan of a siding across and along Forest street to Lawlor's Factory, in the town of Dunnville—Approved.

48. Application of the St. Lawrence and Adirondack Railway Company, for permission to cross the Canada Atlantic Railway at Cecile junction without stopping.—Granted.

49. Application of the Lake Champlain and St. Lawrence Junction Railway Company, for approval of change in the location of its railway in the parish of St. Simon, county of Bagot and province of Quebec.—Approved.

50. Application of the Canadian Pacific Railway Company, for approval of plan and profile of a proposed spur on Fonseca street, in the city of Winnipeg, and crossing Henry street and Logan avenue.—Approved.

51. Application of the Montreal and Ottawa Railway Company (C.P. Ry.), for approval of plan and profile of its proposed crossing of the Richmond road or Wellington street, in the city of Ottawa.—Approved.

52. Application of the Canadian Northern Railway Company, for approval of plan and proposed site of a bridge across the Red river, at Winnipeg.—Approved.

53. Application of the Chateauguay and Northern Railway Company, for approval of an amended plan and proposed site of a bridge across River des Prairies, between Bout de L'Isle and Charlemagne.—Approved.

54. Application of the Ottawa and Gatineau and the Pontiac Pacific Junction Railway Companies, for approval of plan of temporary junction with the Canada Atlantic at Sapper's bridge, in the city of Ottawa.—Approved.

55. Order directing that the Grand Trunk Railway Company shall provide watchmen at its crossings on Dunn and Dowling avenues, in the city of Toronto, for a period of five months, from the 8th day of May, 1901, the wages of such watchmen to be borne one-half by the railway company and the other half by the corporation of the city of Toronto.

56. Application of the Ontario, Belmont and Northern Railway Company, now Marmora Railway and Mining Company, for running powers of a portion of the Central Ontario Railway,—Order issued to the effect, that as adequate and sufficient running powers could not be assured the Marmora Railway and Mining Company, recommends that a contract be entered into for the subsidy in accordance with the Railway Subsidy Act, 62-63 Vic., chap. 7, section 2 and subsection 46.

57. Application of the Grand Trunk Railway Company, for permission to construct a siding along and across a portion of Victoria avenue and across Glenelg street, in the town of Lindsay.—Granted.

58. Application of the Red Mountain Railway Company, for permission to build a branch line to the War Eagle and Centre Star Mining properties, and to junction with the Columbia and Western Railway, shown on plans and profiles submitted.—Granted.

59. Application of the Canadian Pacific Railway Company, for approval of plan and profile of a proposed crossing, at rail level, of Higgins avenue, in the city of Winnipeg, at a point between Point Douglass avenue and Louise bridge.—Approved.

60. Application of the Canadian Pacific Railway Company, for approval of the Governor in Council, the new rules and regulations.—Approved.

61. Application of the Canada Atlantic Railway Company, for approval of plan and profile of its proposed sidings, at the canal basin, in the city of Ottawa, which will cross Wilbrod, Court and St. James streets.—Approved.

62. Complaint of the Messrs. Brennan & Sons, Manufacturing Company, Limited, that the Grand Trunk Railway Company's siding on Rebecca street, in the city of Hamilton, to the premises of the F. W. Fearman Company, Limited, as constructed, injures their property, and ask that it be removed.—Order issued directing that the portion of the said siding extending from the Grand Trunk Railway to about 75 feet east of the eastern boundary of the Brennan property be removed and relaid in the position shown in red on the plan attached to the said order.

63. Application of the Great North West Central Railway Company, for approval of the place and mode of junction of its railway with the Canadian Pacific Railway on lot 27, township 10, range 18 west, in the province of Manitoba.—Approved.

64. Application of the Great North West Central Railway Company, for approval of change in the location of its railway in township 10, range 18, west 1st principal meridian, at or near Chater, in the province of Manitoba.—Approved.

65. Application of the Canadian Pacific Railway Company, for approval of change in the location of its railway from a point at Station 703, west of Selkirk, to the termination of the West Selkirk branch at Lake Winnipeg.—Approved.

66. Application of the Quebec and Lake St. John Railway Company, for approval of change in the location of a portion of its main line at Jacques Cartier river, in the province of Quebec.—Approved.

67. Application of the Canadian Northern Railway Company, for permission to construct a branch line from its main line to some mining properties in the Rainy River district.—Granted.

68. Application of the Canadian Northern Railway Company, for approval of plan and proposed site of a fixed bridge across the Narrows of Rainy lake.—Approved on condition, the company place a swing span in the bridge whenever required.

69. Application of the Dominion Atlantic Railway Company, for approval of plan of a proposed siding in the town of Yarmouth, Nova Scotia.—Approved.

70. Application of the Montreal and Atlantic Railway Company, for approval of change in the location of its railway between Cowansville and the intercolonial boundary.—Approved.

71. Application of the British Columbia Southern Railway Company, for approval of change in the location of the Morrissey Creek branch.—Approved.

72. Application of the Vancouver, Victoria and Eastern Railway and Navigation Company, for approval of change in the location of its railway from 11th to 16th mile from Carson.—Approved.

73. Application of the Vancouver, Victoria and Eastern Railway and Navigation Company, for approval of change in the location of its railway from Cascades to Carson.—Approved.

74. Application of the Vancouver and Lulu Island Railway Company for approval of plan of proposed site and site of proposed bridge across the north arm of the Fraser river near Eburne, British Columbia.—Approved.

75. Application of the Thousand Island Railway Company for approval of the place and mode of junction of its railway with the Grand Trunk Railway at the New Junction station, in the township of Leeds and province of Ontario.—Approved.

76. Application of the Cape Breton Railway Company for approval of the place and mode of junction of its railway with the Intercolonial Railway at Point Tupper, Nova Scotia.—Approved.

77. Application of the Welland and Grand Island Bridge Company for approval of plan and proposed site of a proposed bridge across the west channel of the Niagara river.—Approved.

78. Application of the Great Northern Railway Company for approval of plans and profiles of two proposed crossings, at rail level, of the Canadian Pacific Railway on St. Andrew street, in the city of Quebec.—Approved.

79. Application of the Canadian Pacific Railway Company for approval of plan and profile of proposed crossing of Main street and Maple street, Winnipeg.—Under consideration.

80. Application of the Grand Trunk Railway Company for approval of plan and profile showing improvements made between what is known as Murray Hill on the west and Sidney on the east of the Trent river, a distance of about 8 miles, partly in township of Murray, and partly in town of Trenton, where the track was raised and carried across the Central Ontario Railway.—Approved.

81. Application of the Canadian Pacific Railway Company for an order amending the order of December 16, 1893, so that the city of Toronto shall hereafter bear and pay to the applicant half the cost of the protection and half the cost heretofore borne by the applicant, at the crossings of Dufferin and Bathurst streets, Toronto.—Under consideration.

82. Application of the corporation of the city of Toronto for a re-hearing of the matter of the York street bridge, Toronto.—Approved.

83. Application of the Tilsonburg, Lake Erie and Pacific Railway Company for approval of plans and profiles of two proposed crossings, at rail level, of Canada Southern Railway and a proposed crossing of the Grand Trunk Railway by means of an overhead bridge.—Under consideration.

84. Petition of the corporation of the parish of St. Anselme, P.Q., for an order directing that a highway may be constructed across the track of the Quebec Railway, at rail level, as shown on sketch accompanying the petition.—Under consideration.

85. Application of the Grand Trunk Railway Company for an order closing the Streetsville gravelled road and the Indian road where they cross the Grand Trunk Railway, and approving of their deviation to the proposed subway by a new street north of the track, as shown on the plan submitted, and of the construction of the subway under the company's railway.—Granted.

86. Application of the Niagara, St. Catharines and Toronto Railway Company for an order sanctioning the building of a branch line from their main line on the east of the new Welland canal, in Thorold, through the properties of the Hoover estate, Battle estate, Walker and Cartmell quarries.—Granted.

87. Application of the Sarnia Street Railway Company for approval of plans and profiles of its proposed crossings, at rail level, of the Grand Trunk Railway at Exmouth and Front streets, Sarnia.—Order issued approving of the Exmouth street crossing only.

88. Application of the corporation of the town of Lethbridge for permission to make, construct and maintain certain ditches and culverts on the right of way and under the tracks of the Canadian Pacific Railway Company for use in connection with its municipal water supply.—Granted.

COLLINGWOOD SCHREIBER,
Secretary Railway Committee P. C.

Prepared by
J. W. PUGSLEY,
Clerk of the Railway Committee, P. C.

PART II

STATEMENTS OF THE ACCOUNTANT

No. 1.

Statement showing the amount expended by the Department of Railways and Canals, Dominion of Canada, during the Fiscal Year ended June 30, 1901.

Name of Work.	Chargeable to Capital.	Chargeable to Income.	CHARGEABLE TO REVENUE.	
			Staff.	Repairs.
CANALS.	$ cts.	$ cts.	$ cts.	$ cts.
Beauharnois		483 40	20,118 42	14,199 12
Carillon		9,331 95	13,342 22	13,416 00
Grenville	4,930 65			
Chambly		1,195 09	18,529 48	17,572 35
Cornwall	62,032 47		17,104 13	13,166 89
Culbute	327 00			
Lachine	97,305 52	12,072 87	58,364 29	50,005 48
Lake St. Louis	12,918 31			
Lake St. Francis	15,000 00	8,060 30		
Murray			5,175 74	1,138 15
Rideau			31,334 40	33,791 17
Sault Ste. Marie	323,353 93	48 39	13,730 93	10,289 18
Soulanges	462,626 36	115 00	25,154 78	5,888 77
Ste. Anne's			1,895 89	3,999 02
St. Lawrence.. North Channel	184,790 34			
St. Lawrence.. Galops Channel	91,211 97			
St. Lawrence.. River Reaches	19,389 75			
St. Ours		3,610 06	2,128 25	1,681 44
St. Peter's		2,311 26	2,730 44	841 63
Trent	284,503 89	10,494 82	5,254 51	13,075 89
Welland	224,536 96	87,777 43	86,889 24	72,055 89
Williamsburg. Galops	390,112 78		12,342 32	11,755 09
Williamsburg. Rapide Plat	76,501 57			
Williamsburg. Farran's Point	111,158 39			
Total	2,360,699 89	135,500 57	314,095 04	262,876 07
GENERAL ON CANALS.				
Arbitrations and awards		782 14		
Dredge vessels—Lachine				3,598 05
" Rideau				6,999 27
Miscellaneous		4,964 34	1,188 24	1,123 53
Salaries and contingencies, canal officers			32,957 57	
Sunday labour			16,071 95	
Surveys and inspections		2,268 34		
Ottawa River surveys		9,999 65		
Total		18,014 47	50,217 76	11,720 85
RAILWAYS.				
Annapolis and Digby		8,381 82		
Canadian Pacific	8,978 87			
Intercolonial $3,652,313 46				
Less refunds previous years. 18,476 89				
	3,633,836 57		5,460,422 64	
Prince Edward Island	280,173 93		261,766 24	
Windsor Branch			16,862 66	
Total	3,922 989 37	8,381 82	5,739,051 54	
GENERAL ON RAILWAYS.				
Exploratory survey, Klondike district and ocean port, B.C		12,226 52		
Railway Statistics		590 54		
Carried forward		12,817 06		

No. 1.—**Statement** showing the amount expended by the Department of Railways and Canals, &c.—*Concluded.*

Name of Work.	Chargeable to Capital.	Chargeable to Income.	Chargeable to Revenue.	
			Staff.	Repairs.
	$ cts.	$ cts.	$ cts.	$ cts.
Brought forward		12,817 06		
General on Railways—*Concluded.*				
Railway Subsidies		2,512,328 86		
Repairs to Governor General's car		1,000 00		
Reporting evidence before Railway Committee of the Privy Council		342 60		
Subscription to Railway Congress, Brussels		97 33		
Surveys and inspections		6,019 97		
Total		2,532,605 82		
Miscellaneous.				
Gratuity to widow of late J. R. Chamberlain		116 66		
Costs of litigation		4,306 57		
Salaries of engineers, draughtsmen, &c		20,661 08		
" extra clerks, &c		3,155 89		
Total		28,240 20		
Recapitulation.				
Total on Canals	2,360,699 89	135,500 57	314,095 04	262,876 07
" " general		18,014 47	50,217 76	11,720 85
Total on Canals	2,360,699 89	153,515 04	364,312 80	274,596 92
Total on Railways	3,922,989 37	8,381 82	5,739,051 54	
" " general		2,532,605 82		
Total on Railways	3,922,989 37	2,540,987 64	5,739,051 54	
Grand Total, Railways and Canals, including Miscellaneous	6,283,689 26	2,722,742 88	6,103,364 34	274,596 92

Total amount expended, $15,384,393.40.

S. LEONARD SHANNON,
Accountant.

Department of Railways and Canals,
Ottawa, October 31, 1901.

No. 2.

STATEMENT showing the amount expended on Construction, Renewals, Ordinary Repairs and Working Staff of the Canals of the Dominion of Canada, up to June 30, 1901.

ST. PETER'S CANAL.

—	Year ending June 30.	Capital.	Renewals, Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	.....	156,523 32			
" since " " ..	1868	21,519 72			
" " " " ..	1869	70,719 80			
" " " " ..	1870		46,193 57		
" " " " ..	1871			225 36	555 78
" " " " ..	1872			280 00	6,122 07
" " " " ..	1873			343 32	6,539 58
" " " " ..	1874			725 93	1,558 57
" " " " ..	1875	20 97		560 00	889 35
" " " " ..	1876	11,125 00		641 55	
" " " " ..	1877	63,330 18		600 00	17 45
" " " " ..	1878	26,511 51		600 00	
" " " " ..	1879	107,337 75		631 50	
" " " " ..	1880	80,120 54		400 00	
" " " " ..	1881	69,434 76		959 58	
" " " " ..	1882	484 00		1,920 54	200 63
" " " " ..	1883			2,089 19	232 42
" " " " ..	1884	2,471 40		2,601 47	367 85
" " " " ..	1885	16,820 15		1,929 11	183 11
" " " " ..	1886	2,316 85		2,360 67	297 81
" " " " ..	1887	1,087 75	750 00	2,777 13	343 23
" " " " ..	1888			3,217 77	1,588 40
" " " " ..	1889		500 00	3,085 29	353 38
" " " " ..	1890			3,110 15	255 34
" " " " ..	1891	972 65	510 53	3,255 30	312 02
" " " " ..	1892	14,387 00	30,936 82	3,007 70	1,461 24
" " " " ..	1893	811 59	9,987 78	2,938 15	1,856 30
" " " " ..	1894	437 05	3,852 21	2,935 94	1,986 70
" " " " ..	1895	868 44	26,222 46	2,490 81	353 55
" " " " ..	1896	1,455 21	16,743 64	2,182 04	260 90
" " " " ..	1897			2,728 38	1 20
" " " " ..	1898		111 70	2,785 25	453 85
" " " " ..	1899			2,819 86	456 61
" " " " ..	1900			2,833 24	1,483 30
" " " " ..	1901		2,311 26	2,730 44	841 63
		648,755 64			
LESS—Refunds of previous years......	.....	208 50			
Total	....	*648,547 14	138,119 97	59,774 67	28,972 27

* Expenditure as above	$ 648,547 14
Less expenditure prior to Confederation............	156,523 32
Agreeing with Public Accounts, 1901, page xvi.....	$ 492,023 82

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

Statement showing the amounts expended on Construction, Renewals, &c.—*Con.*

BAIE VERTE CANAL.

——	Year ending June 30.	Capital.	Income.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" since "	1868		
" " "	1869		
" " "	1870		
" " "	1871		17,929 34
" " "	1872		6,399 41
" " "	1873		14,943 83
" " "	1874		4,018 90
" " "	1875		443 00
" " "	1876		110 75
" " "	1877		22 30
" " "	1878		
" " "	1879		
" " "	1880		
" " "	1881		520 00
" " "	1882		
" " "	1883		
" " "	1884		
" " "	1885		
" " "	1886		
" " "	1887		
" " "	1888		
" " "	1889		
" " "	1890		
" " "	1891		
" " "	1892		
" " "	1893		
" " "	1894		
" " "	1895		
" " "	1896		
" " "	1897		
" " "	1898		
" " "	1899		
" " "	1900		
" " "	1901		
Total			44,387 53

S. LEONARD SHANNON,
Accountant.

Department of Railways and Canals,
Ottawa, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

LACHINE CANAL.

——	Year ending June 30.	Chargeable to Capital.		Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Expenditure by Imperial Government..................	....	40,000 00		....	....	....
Government expenditure prior to Confederation........	......	2,547,532 85		....	....	....
Government expenditure since Confederation..	1868	....		1,852 70	13,742 05	10,431 51
" " ..	1869	2,000 00		....	14,209 02	12,085 84
Cost of original construction and enlargement of 1843 to 1848..	.....	....	2,589,532 85			
Expenditure by Dominion Government..	1870	....		....	15,834 49	13,302 39
" " ..	1871	....		12,231 40	17,478 52	15,093 25
" " ..	1872	36,708 15		....	16,076 93	12,334 69
" " ..	1873	7,824 28		35,158 21	23,601 03	34,300 60
" " ..	1874	158,618 35		....	25,811 07	22,828 66
" " ..	1875	197,420 52		....	28,592 01	30,057 34
" " ..	1876	327,769 39		....	33,797 73	29,103 65
" " ..	1877	1,439,375 73		....	33,148 86	19,824 33
" " ..	1878	1,484,619 63		....	39,062 97	13,646 41
" " ..	1879	958,053 30		....	42,338 84	12,400 78
" " ..	1880	369,566 74		....	38,950 90	10,223 62
" " ..	1881	292,165 51		....	39,027 99	19,888 33
" " ..	1882	252,821 33		2,978 66	41,158 90	17,116 46
" " ..	1883	396,496 96		1,859 68	45,554 91	18,199 59
" " ..	1884	188,266 18		....	48,624 51	19,683 24
" " .	1885	111,215 23		....	49,004 85	20,199 78
" " ..	1886	210,509 42		....	50,969 10	19,199 18
" " .	1887	28,772 52		12,981 59	53,113 97	22,567 81
" " ..	1888	19,414 34		7,996 38	52,229 61	19,999 64
" " ..	1889	76,032 96		972 71	54,110 67	22,957 71
" " ..	1890	7,448 03		8,238 46	53,114 34	22,999 38
" " ..	1891	217 53		16,155 75	50,721 69	36,292 98
" " ..	1892	87,852 35		27,480 80	52,729 37	67,499 62
" " ..	1893	445,983 21		50,937 40	53,185 00	51,616 79
" " ..	1894	64,345 14		17,152 48	60,174 03	40,939 70
" " ..	1895	189,944 36		32,405 20	56,337 44	25,891 45
" " ..	1896	184,998 25		8,193 15	58,342 96	24,950 20
" " ..	1897	282,052 48		14,664 21	57,533 20	25,820 73
" " ..	1898	216,717 44		819 62	57,282 50	33,391 92
" " ..	1899	162,351 83		3,103 99	55,990 00	35,776 90
" " ..	1900	125,009 41		12,210 88	56,791 45	31,988 81
" " ..	1901	97,305 52		12,072 87	58,364 29	50,005 48
Cost of enlargement.........	....	....	8,419,876 09			
Total.........	......	....	11,009,408 94	278,170 40	1,447,005 20	862,618 77

Total expenditure on capital account as above		$11,009,408 94
Less charged to St. Lawrence River and Canals, see page 9..	$2,950,104 15	
Less expenditure by Imperial Government.................	40,000 00	
		2,990,104 15
Agreeing with Public Accounts balance sheet, 1901, page xvi........		$ 8,019,304 79

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

BEAUHARNOIS CANAL.

——	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
			$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	....	1,611,424 11	....	....	....
" since " ..	1868	....	63,193 75	9,349 99	6.216 98
" " " ..	1869	....	55 00	9,626 99	6,498 57
" " " ..	1870	....	27 50	10,117 57	6,384 81
" " " ..	1871	....	....	12,316 53	5,722 36
" " " ..	1872	....	27 50	15,733 38	11,792 46
" " " ..	1873	....	5,122 50	12,210 73	9,882 06
" " " ..	1874	....	26 00	15,392 51	10,990 56
" " " ..	1875	....	36 00	14,399 32	12,253 01
" " " ..	1876	....	....	14,465 86	17,170 83
" " " ..	1877	....	....	14,377 63	15,207 36
" " " ..	1878	....	....	14,383 37	9,861 05
" " " ..	1879	....	....	15,015 86	10,370 71
" " " ..	1880	266 15	....	15,362 61	8,997 34
" " " ..	1881	....	....	17,659 93	10,770 67
" " " ..	1882	....	....	18,804 53	20,813 86
" " " ..	1883	....	6,727 44	18,287 77	15,826 71
" " " ..	1884	....	3,277 98	19,107 38	16,232 61
" " " ..	1885	....	7.999 79	18,960 40	14,637 70
" " " ..	1886	....	8,491 80	19,228 90	14,356 00
" " " ..	1887	....	3,633 57	18,867 45	14,999 88
" " " ..	1888	....	14,411 97	19,325 05	14,285 98
" " " ..	1889	....	10,993 52	20,019 11	14,982 54
" " " ..	1890	....	....	19,847 42	14,999 20
" " " ..	1891	....	17,085 68	18,886 86	12.537 39
" " " ..	1892	....	1,696 23	20,050 01	14,999 80
" " " ..	1893	....	....	20,348 34	14,107 11
" " " ..	1894	....	6,547 72	20,574 53	13,903 46
" " " ..	1895	....	27,982 93	20,428 59	12,299 49
" " " ..	1896	....	....	20,725 47	15,050 85
" " " ..	1897	....	9,813 15	21,012 64	14,862 98
" " " ..	1898	25,000 00	5,799 34	20,650 00	16,164 92
" " " ..	1899	....	1,000 00	20,613 22	13,463 01
" " " ..	1900	....	4,959 22	20,147 59	14,505 30
" " " ..	1901	....	483 40	20,118 42	14,199 12
Total	..	*1,636,690 26	199,391 99	582,475 04	443,287 60

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* See page 9 for total cost of St. Lawrence River and Canals.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

Statement showing the amounts expended on Construction, Renewals, &c.—*Con.*

ST. LAWRENCE RIVER AND CANALS, SURVEYS, &c.

——	Year ending June 30.	Chargeable to Capital.				Chargeable to Income.
		North Channel.	River Reaches.	Galops Channel.	Total.	
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	.....	.....	.....	.....	18,442 85	98,378 46
Government expenditure since Confederation..	1868	.....	.....	.....	.....	.....
" " ..	1869	.....	.....	.....	.....	.....
" " ..	1870	.....	.....	.....	.....	.....
" " ..	1871	.....	.....	.....	.....	.....
" " ..	1872	.....	.....	.....	.....	.....
" " ..	1873	.....	.....	.....	33,241 69	.....
" " ..	1874	.....	.....	.....	26,541 30	.....
" " ..	1875	.....	.....	.....	20,611 36	.....
" " ..	1876	.....	.....	.....	50,215 47	.....
" " ..	1877	.....	.....	.....	47,377 31	.....
" " ..	1878	.....	.....	.....	5,570 46	.....
" " ..	1879	.....	.....	.....	9,265 77	.....
" " ..	1880	.....	.....	.....	9,214 56	.....
" " ..	1881	.....	.....	.....	6,927 96	.....
" " ..	1882	.....	6,933 45	22,000 00	28,933 45	.....
" " ..	1883	.....	3,574 31	41,300 00	44,874 31	.....
" " ..	1884	.....	15,546 03	74,300 00	89,846 03	.....
" " ..	1885	.....	13,710 17	101,400 00	115,110 17	.....
" " ..	1886	.....	16,251 73	99,800 00	116,051 73	.....
" " ..	1887	.....	20,037 31	54,400 00	74,437 31	.....
" " ..	1888	.....	16,282 85	40,400 00	56,682 85	.....
" " ..	1889	.....	1,293 92	17,200 00	18,493 92	.....
" " ..	1890	.....	18,279 91	5,700 00	23,979 91	.....
" " ..	1891	.....	35,137 25	.....	35,137 25	.....
" " ..	1892	.....	59,779 31	.....	59,779 31	.....
" " ..	1893	.....	52,643 39	.....	52,643 39	.....
" " ..	1894	.....	13,721 66	.....	13,721 66	.....
" " ..	1895	.....	1,223 72	181,552 03	182,775 75	.....
" " ..	1896	.....	7,457 05	.....	7,457 05	.....
" " ..	1897	.....	12,347 31	.....	12,347 31	.....
" " ..	1898	171,336 65	7,491 11	32,710 00	211,537 76	.....
" " ..	1899	461,979 50	9,366 47	42,430 00	513,775 97	.....
" " ..	1900	225,000 00	72,484 41	50,000 00	347,484 41	.....
" " ..	1901	184,790 34	19,389 75	91,211 97	295,392 06	.....
		1,043,106 49	402,951 11	854,404 00	2,527,670 33	98,378 46

ST. LAWRENCE RIVER AND CANALS.

St. Lawrence River and Canals, as above		$ 2,527,670 33
Beauharnois Canal, see page 8		1,636,690 26
Cornwall Canal	" 12	6,794,929 98
Williamsburg Canal	" 14	8,615,997 65
Lake St. Louis	" 10	274,750 49
Soulanges Canal	" 26	6,254,692 43
Lachine Canal, from prior to Confederation to June 30, 1875, see page 7		2,950,104 15
Lake St. Francis, see page 11		56,961 46
Agreeing with Public Accounts Balance Sheet, 1901, page xvi		$29,111,796 75

S. LEONARD SHANNON,
Accountant.

Department of Railways and Canals,
Ottawa, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

LAKE ST. LOUIS.

—	Year ending June 30.	Chargeable to Capital.	Chargeable to Income.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" " since "	1868		
" " " "	1869		
" " " "	1870		
" " " "	1871		
" " " "	1872		
" " " "	1873		
" " " "	1874		
" " " "	1875		
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" " " "	1890		
" " " "	1891		
" " " "	1892		
" " " "	1893		
" " " "	1894		
" " " "	1895	4,753 14	
" " " "	1896	49,909 31	
" " " "	1897	73,300 41	
" " " "	1898	64,495 83	
" " " "	1899	57,607 79	
" " " "	1900	11,765 70	
" " " "	1901	12,918 31	
Total		*274,750 49	

* Included in total cost of St. Lawrence River and Canals, see page 9.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

LAKE ST. FRANCIS.

——	Year ending June 30.	Capital.	Renewals Chargeable to Income.
		$ cts.	$ cts.
Government expenditure since Confederation	1868		
" " " "	1869		
" " " "	1870		
" " " "	1871		
" " " "	1872		
" " " "	1873		
" " " "	1874		
" " " "	1875		
" " " "	1876		
" " " "	1877		
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" " " "	1892		
" " " "	1893		
" " " "	1894		
" " " "	1895		
" " " "	1896		
" " " "	1897		
" " " "	1898	3,420 00	
" " " "	1899	23,110 00	
" " " "	1900	15,431 46	12,288 39
" " " "	1901	15,000 00	8,060 30
Total		*56,961 46	20,348 69

* Included in total cost of St. Lawrence River Canals, see page 9.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

CORNWALL CANAL.

—	Year ending June 30.	Chargeable to Capital.		Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation......	......	1,933,152 69		....	....	....
Government expenditure since Confederation..	1868	....		2,786 00	11,244 47	3,774 18
" " ..	1869	10,692 04		....	10,347 91	3,859 14
" " ..	1870	....		17,780 05	10,368 16	7,145 42
" " ..	1871	....		7 50	11,848 39	8,891 61
" " ..	1872	....		10,000 21	10,594 30	8,163 70
" " ..	1873	....		1,011 75	13,042 25	12,467 65
" " ..	1874	....		....	13,405 20	7,610 70
" " ..	1875	1,780 00		....	13,351 91	7,097 34
Cost of original construction...	......	....	1,945,624 73			
Expenditure by Dominion Government..	1876	....		....	13,320 61	6,423 67
" " ..	1877	49,211 37		....	13,375 70	6,440 54
" " ..	1878	145,015 45		....	13,825 50	4,935 21
" " ..	1879	143,032 05		....	13,817 96	4,983 15
" " ..	1880	109,454 95		....	14,440 33	9,735 76
" " .	1881	53,948 14		....	15,173 60	5,524 10
" " ..	1882	44,587 61		....	15,052 20	6,634 62
" " ..	1883	21,728 93		....	18,283 67	8,361 71
" " ..	1884	22,018 13		....	18,475 48	9,007 73
" " ..	1885	62,034 90		16,298 96	15,988 96	12,368 51
" " ..	1886	57,820 83		6,960 95	15,994 80	11,832 83
" " ..	1887	46,966 43		....	17,520 54	12,100 29
" " ..	1888	67,945 74		....	16,938 54	13,942 64
" " ..	1889	163,993 85		....	17,890 55	58,205 26
" " ..	1890	365,038 01		2,000 00	17,063 49	12,758 18
" " ..	1891	599,001 85		1,459 98	16,077 72	9,830 05
" " ..	1892	398,555 25		2,345 26	15,596 66	9,864 36
" " ..	1893	352,536 13		....	15,173 01	9,668 14
" " ..	1894	404,990 22		....	15,344 02	7,733 54
" " ..	1895	450,689 65		21,497 74	15,414 56	13,053 55
" " ..	1896	448,408 31		2,175 00	15,472 26	25,259 56
" " ..	1897	438,487 51		....	15,540 43	16,438 32
" " ..	1898	133,208 96		....	15,011 50	15,431 02
" " ..	1899	37,649 00		15,960 80	16,000 00	14,023 90
" " ..	1900	169,889 51		18,547 50	18,798 10	13,998 29
" " ..	1901	62,032 47		....	17,104 13	13,166 89
Cost of enlargement......	...	....	4,849,305 25			
Total........	.....	....	*6,794,929 98	118,831 70	506,896 91	391,331 56

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* Included in total cost of St. Lawrence River and Canals, see page 9.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

WILLIAMSBURG CANALS.

	Year ending June 30.	Capital.				Renewals, Chargeable to Income.	Staff.	Repairs.
		Farran's Point.	Galops.	Rapide Plat.	Total.			
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation being amount of original construction					1,320,655 54			
Government expenditure since Confederation	1868						5,745 97	6,442 41
" " "	1869						5,769 81	5,670 88
" " "	1870						5,573 13	6,546 16
" " "	1871						6,382 17	5,308 41
" " "	1872					1,077 00	5,542 94	3,230 07
" " "	1873						6,424 49	7,347 75
" " "	1874						6,857 19	7,395 92
" " "	1875						6,547 62	4,110 29
" " "	1876						7,418 39	11,690 98
" " "	1877						7,388 08	10,053 61
" " "	1878						7,430 11	4,449 78
" " "	1879						7,517 20	3,549 71
" " "	1880						7,590 15	3,999 77
" " "	1881						7,572 35	5,020 73
" " "	1882						7,589 44	7,447 69
" " "	1883				13 19		7,423 48	7,299 39
" " "	1884				2,473 44		7,757 04	7,349 37
" " "	1885		70,764 07	32,473 05	103,237 12		7,696 67	8,198 03
" " "	1886		78,014 92	71,820 79	149,835 71		7,671 54	7,847 05
" " "	1887		32,862 02	82,990 98	115,853 00		7,635 54	7,904 76
" " "	1888		16,628 95	53,499 34	70,128 29	1,613 67	7,646 79	8,190 13
" " "	1889		37,661 15	22,206 11	59,867 26		7,485 28	8,794 61
" " "	1890		126,417 42	12,660 95	139,078 37		8,954 53	8,191 69
" " "	1891	2,853 76	172,779 88	55,036 96	230,670 60		8,678 25	7,987 40
" " "	1892		218,511 17	158,034 15	376,545 32	797 83	9,458 33	8,551 32
" " "	1893		154,524 01	217,669 28	372,193 29	3,675 00	8,676 03	8,347 97
" " "	1894		223,992 81	274,397 42	498,390 23		10,230 09	7,029 95
" " "	1895		118,464 53	228,892 70	347,357 23	13,720 36	9,675 09	7,371 37

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

WILLIAMSBURG CANALS—*Concluded.*

—	Year ending June 30.	Capital.				Renewals Chargeable to Income.	Staff.	Repairs.
		Farran's Point.	Galops.	Rapide Plat.	Total.			
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Goverment expenditure since Confederation	1896	4,980 00	150,744 16	286,396 96	442,121 12	8,607 04	9,588 51	9,036 00
" " "	1897	....	262,795 78	205,480 55	468,274 33	3,880 76	8,697 54	8,210 71
" " "	1898	231,321 44	734,492 07	116,072 55	1,081,886 06	....	10,708 66	8,032 84
" " "	1899	346,956 54	987,186 44	57,869 18	1,392,012 16	7,410 00	9,960 64	10,000 00
" " "	1900	100,534 64	752,799 27	14,298 74	867,632 65	4,137 04	11,092 06	10,897 79
" " "	1901	111,158 39	390,112 78	76,501 57	577,772 74	....	12,342 32	11,755 09
Total	......	797,804 77	4,528,749 43	1,966,301 28	*8,615,997 65	44,918 70	272,727 43	253,259 63

* Original construction	$ 1,320,655 54
Cost of enlargement	7,295,342 11
Total	$ 8,615,997 65

Included in total cost of St. Lawrence River and Canals, page 9.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

Statement showing the amounts expended on Construction, Renewals, &c.—*Con.*

WELLAND CANAL.

——	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Imperial Governement	....	222,220 00	....	....	....
Government expenditure prior to Confederation	....	7,416,019 83	....	....	....
" since "	1868	12,097 84	....	37,679 05	38,852 96
" " "	1869	43,486 36	....	39,060 61	50,773 03
" " "	1870	....	22,173 72	40,340 45	65,009 19
" " "	1871	....	48,569 10	42,383 33	53,381 02
" " "	1872	53,680 32	6,022 44	37,085 37	50,276 90
" " "	1873	82,282 20	47,876 27	45,382 99	66,550 73
" " "	1874	746,420 61	....	50,966 48	103,666 99
" " "	1875	1,047,119 91	....	52,595 00	88,539 99
" " "	1876	1,569,478 19	700 00	57,623 31	81,376 12
" " "	1877	2,199,962 61	....	59,963 47	49,783 93
" " "	1878	2,138,392 99	....	60,138 59	66,393 53
" " "	1879	1,552,697 41	....	59,912 23	56,755 57
" " "	1880	1,252,924 75	....	63,198 10	76,535 25
" " "	1881	1,242,943 37	6,593 19	56,398 04	69,249 53
" " "	1882	603,402 17	13,664 80	74,641 51	84,374 97
" " "	1883	549,433 29	5,979 03	109,207 21	72,707 62
" " "	1884	432,336 21	....	113,276 87	90,926 97
" " "	1885	463,505 38	6,150 21	112,670 00	91,534 66
" " "	1886	215,380 75	1,359 00	111,660 22	69,507 48
" " "	1887	1,071,073 87	3,828 67	109,371 69	77,440 80
" " "	1888	429,720 94	10,740 86	110,806 01	86,518 97
" " "	1889	225,910 21	43,803 80	113,587 05	77,547 77
" " "	1890	117,633 22	51,648 28	109,202 02	72,686 19
" " "	1891	36,371 03	19,767 73	107,662 63	82,548 30
" " "	1892	29,541 21	9,008 80	104,673 73	73,771 87
" " "	1893	8,259 94	25,103 13	104,926 73	65,016 84
" " "	1894	1,571 78	13,430 20	102,018 80	53,053 71
" " "	1895	3,809 35	24,245 02	90,438 07	48,270 94
" " "	1896	1,677 67	18,768 99	87,988 11	62,542 64
" " "	1897	2,282 35	22,283 06	88,095 20	41,247 81
" " "	1898	....	34,803 25	84,806 54	59,571 66
" " "	1899	....	30,099 84	86,110 88	56,270 60
" " "	1900	18,167 29	37,164 84	84,888 36	59,507 64
" " "	1901	224,536 96	87,777 43	86,889 24	72,055 89
Total	....	*24,014,340 01	591,561 66	2,695,677 89	2,314,248 07

*Total expenditure as above	$	24,014,340 01
Less expenditure by Imperial Government		222,220 00
Agreeing with Public Accounts Balance Sheet, 1901, page xvi	$	23,792,120 01
Original cost of construction, including first enlargement	$	7,693,824 03
Enlargement, including new Welland Canal		16,320,515 98
Total expenditure as above	$	24,014,340 01

S. LEONARD SHANNON,
Accountant.

Department of Railwayt Canals,
Ottawa, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

STE. ANNE'S LOCK AND CANAL.

—	Year ending June 30.	Capital.	Renewals, Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	. .	134,456 51	....	....	....
" since " ..	1868	....	....	778 16	432 47
" " " ..	1869	....	....	1,062 96	1,873 51
" " " ..	1870	....	....	1,136 54	1,280 36
" " " ..	1871	....	....	1,285 84	1,539 02
" " " ..	1872	....	1,939 46	1,106 80	1,393 63
" " " ..	1873	....	540 11	2,199 64	1,264 40
" " " ..	1874	12,753 27	....	2,614 90	7,208 63
" " "	1875	32,627 71	....	1,859 20	4,506 68
" " " .	1876	24,935 85	....	1,952 14	4,033 72
" " " ..	1877	30,003 08	....	1,982 65	1,756 93
" " " .	1878	14,618 85	....	2,057 32	541 95
" " " ..	1879	22,113 02	....	2,202 03	3,259 70
" " " ..	1880	3,054 68	....	2,152 57	1,704 71
" " " ..	1881	69,042 76	....	2,553 02	3,257 92
" " " ..	1882	193,158 36	....	2,611 30	2,343 99
" " " ..	1883	172,959 95	....	2,569 86	3,448 83
" " " ..	1884	142,006 25	....	2,775 32	2,725 49
" " " .	1885	93,679 57	....	2,618 60	4,042 04
" " " ..	1886	120,681 67	....	2,611 90	5,803 01
" " " ..	1887	45,276 08	6,054 10	2,537 41	1,499 96
" " " ..	1888	18,910 55	1,372 59	2,505 61	1,380 75
" " " ..	1889	24,786 33	....	2,569 22	1,730 79
" " " ..	1890	6,151 14	....	2,571 04	1,525 51
" " " ..	1891	....	8,173 69	2,505 69	1,503 56
" " " ..	1892	....	25,471 61	2,571 28	1,666 21
" " " ..	1893	....	6,521 88	2,581 08	2,800 03
" " " ..	1894	....	3,497 56	2,640 00	2,799 63
" " " ..	1895	....	3,694 33	2,508 14	3,025 91
" " " ..	1896	....	....	2,495 54	4,993 89
" " " ..	1897	....	....	2,357 51	1,688 12
" " " ..	1898	....	....	1,904 10	1,699 44
" " " ..	1899	....	....	1,920 12	1,997 96
" " " ..	1900	....	....	1,840 51	2,679 21
" " " ..	1901	....	....	1,895 89	3,999 02
Total....................	....	*1,170,215 63	57,265 33	73,533 89	87,406 98

*Included in total cost of Ottawa River Works, see page 19.

Original contruction	$	134,456 51
Enlargement, including new lock		1,035,759 12
	$	1,170,215 63

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

CARILLON AND GRENVILLE CANAL.

—	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Imperial Government....	......	*	....	....	....
Government expenditure prior to Confederation	......	63,053 64	....	....	....
" since " ..	1868	....	19,817 22	6,301 88	8,911 28
" " " ..	1869	....	....	6,549 38	10,157 42
" " " ..	1870	....	4,167 96	6,617 81	9,852 09
" " " ..	1871	....	23,119 37	8,676 90	8,218 24
" " " ..	1872	165,257 28	....	8,324 51	17,235 31
" " " ..	1873	133,199 10	3,051 38	10,068 28	8,781 50
" " " ..	1874	245,258 38	....	10,710 88	10,605 82
" " " ..	1875	339,864 76	... . . .	10,378 57	18,520 44
" " " ..	1876	326,203 16	....	10,764 38	11,475 96
" " " ..	1877	245,738 04	... .	11,050 27	10,304 06
" " " .	1878	22,676 20	....	11,401 30	5,082 72
" " " ..	1879	243,141 24	....	11,501 22	7,629 98
" " " ..	1880	281,514 27	....	11,959 14	7,625 54
" " " ..	1881	336,707 53	....	13,059 18	8,076 91
" " " ..	1882	433,084 39	.. ..	14,387 49	7,582 68
" " " ..	1883	433,575 10	....	17,479 58	8,310 02
" " " ..	1884	399,267 16	....	17,393 91	7,918 42
" " " ..	1885	157,187 72	....	19,702 30	10,429 26
" " " .	1886	104,973 24	75 00	20,597 82	9,303 31
" " " ..	1887	20,747 11	....	20,011 36	10,554 41
" " " ..	1888	38,996 29	....	21,531 12	10,036 62
" " " ..	1889	298 17	....	22,098 88	10,135 66
" " " ..	1890	17 58	4,526 61	15,896 16	7,582 38
" " " ..	1891	....	4,395 25	21,230 22	10,796 68
" " " ..	1892	34,585 64	15,036 48	17,458 69	8,620 15
" " " ..	1893	207 00	42,298 74	16,762 71	10,669 28
" " " ..	1894	335 55	20,034 94	14,144 98	11,620 09
" " " ..	1895	....	5,963 76	15,453 21	12,303 25
" " " ..	1896	3,850 31	....	13,995 69	12,161 10
" " " ..	1897	1,908 44	4,939 20	13,780 29	11,607 95
" " " ..	1898	82,663 37	5,082 03	11,697 81	10,993 61
" " " .	1899	39,999 37	....	11,919 27	11,478 88
" " " ..	1900	22,802 27	4,476 50	13,657 06	14,666 71
" " " ..	1901	4,930 65	9,331 95	13,342 22	13,416 00
Total.....	. ....	†4,182,092 96	166,316 39	469,904 77	352,663 78

* Expenditure not given—records relating to same were kept in Ordnance Office at Montreal and were destroyed by fire in 1852.

† Included in total cost of Ottawa River Works, see page 19, cost of enlargement, $4,119,039.32.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

CULBUTE LOCK AND DAM.

	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure since Confederation.	1868	....	....	....	....
" " " ..	1869	....	....	....	....
" " " ..	1870	....	....	....	....
" " " ..	1871	....	....	....	....
" " " ..	1872	....	....	....	....
" " " ..	1873	....	835 53	....	....
" " " ..	1874	....	38,388 99	....	....
" " " ..	1875	63,659 29	....	....	....
" " " ..	1876	76,842 44	....	....	....
" " " ..	1877	56,081 87	....	....	....
" " " ..	1878	5,933 53	....	....	....
" " " ..	1879	20,694 19	....	....	....
" " " ..	1880	16,688 20	....	202 50	259 31
" " " ..	1881	4,721 62	....	962 85	....
" " " ..	1882	29,567 15	....	790 00	162 33
" " " ..	1883	14,249 60	....	695 00	288 99
" " " ..	1884	8,151 16	....	733 50	....
" " " ..	1885	19,071 76	....	730 00	572 75
" " " ..	1886	26,385 27	....	730 00	2,396 14
" " " ..	1887	7,760 88	....	730 00	967 33
" " " ..	1888	7,573 99	....	739 50	730 60
" " " .	1889	17,112 01	....	1,050 00	116 53
" " " ..	1890	2,818 35	....	747 83	....
" " " ..	1891	2,183 15	9,122 66	745 25	499 91
" " " ..	1892	....	1,546 25	736 00	....
" " " ..	1893	....	1,420 65	749 00	13 55
" " " ..	1894	....	2,540 14	730 00	494 43
" " " ..	1895	....	1,475 26	436 05	434 28
" " " ..	1896	....	....	....	....
" " " ..	1897	....	....	....	....
" " " ..	1898	....	....	....	100 00
" " " ..	1899	....	....	....	....
" " " ..	1900	3,085 00	....	....	....
" " " ..	1901	327 00	....	....	....
Total....................	.....	*382,906 46	55,328 87	11,507 48	7,036 15

* Included in total cost of Ottawa River Works, see page 19.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS.
OTTAWA, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

RIDEAU CANAL.

——	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Imperial Government	...	3,911,701 47	....	....	....
Government expenditure prior to Confederation	.....	153,062 60	....	....	....
" since "	1868	166 50	7,298 12	18,397 28	16,475 21
" " "	1869	....	....	19,250 71	13,140 77
" " "	1870	....	13 16	20,022 37	19,469 33
" " "	1871	....	11,732 98	22,814 58	18,120 52
" " "	1872	....	4,967 50	22,139 48	14,005 32
" " "	1873	....	18,070 97	22,841 51	26,074 49
" " "	1874	....	5,793 16	26,815 44	22,957 40
" " "	1875	9,310 85	....	26,553 37	19,699 81
" " "	1876	2,163 96	....	26,430 77	14,428 25
" " "	1877	214 11	....	25,959 56	14,198 18
" " "	1878	....	....	26,651 51	11,034 22
" " "	1879	7,703 88	....	26,042 52	7,134 55
" " "	1880	....	....	26,463 88	11,434 05
" " "	1881	....	133 50	26,024 71	8,627 00
" " "	1882	....	....	26,915 29	13,860 28
" " "	1883	....	70 65	27 322 81	23,524 84
" " "	1884	....	4,597 50	26,938 95	19,245 02
" " "	1885	....	2,098 76	26,971 32	18,189 55
" " "	1886	....	550 00	27,045 95	35,648 04
" " "	1887	....	20,823 96	29,440 46	18,565 34
" " "	1888	....	18,889 48	33,458 83	25,478 87
" " "	1889	....	6,665 22	33,801 77	18,106 36
" " "	1890	....	21,124 10	34,270 57	18,025 21
" " "	1891	....	20,967 25	34,641 98	21,537 56
" " "	1892	....	31,363 23	35,500 82	21,507 16
" " "	1893	....	24,274 71	35,022 49	18,789 50
" " "	1894	....	14,485 11	34,943 35	16,939 47
" " "	1895	....	31,559 48	33,827 08	19,897 32
" " "	1896	....	21,452 29	34,052 77	30,196 38
" " "	1897	....	19,079 11	31,461 55	29,535 94
" " "	1898	....	13,608 39	30,759 05	26,599 93
" " "	1899	....	700 29	30,751 20	28,199 49
" " "	1900	....	11,780 41	30,623 27	30,237 09
" " "	1901	....	....	31,334 40	33,791 17
Total	...	*4,084,323 37	312,099 33	965,491 60	684,673 62

* Ottawa River Works.

Ste. Anne's Lock, page 16		$ 1,170,215 63
Carillon and Grenville Canal, page 17		4,182,092 96
Culbute Canal, page 18		382,906 46
Rideau Canal as above	$ 4,084,323 37	
Less expenditure by Imperial Government	3,911,701 47	
		172,621 90
Total Ottawa Works (Capital)		$ 5,907,836 95
Add expenditure on slides and booms prior to Confederation	$ 719,247 13	
Since Confederation	7,243 60	
Add expenditure on Chats Canals prior to Confederatian	482,950 81	
Add expenditure in 1881, charged to Miscellaneous, *see* page 229, part ii Public Accounts	1,136 84	
Add amount transferred, *see* page xxxvi Public Accounts, Balance Sheet, 1881	233,555 85	
		1,444,134 23
		$ 7,351,971 18
Less expenditure prior to Confederation, transferred to Income Accounts	$ 320,618 28	
Less expenditure, 1872, on Carillon and Grenville Canal, as shown in Public Accounts Balance Sheet, page xx, under Miscellaneous	165,257 28	
		485,875 56
Agreeing with Balance Sheet, Public Accounts. 1900, page xvi		$ 6,866,095 62

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

S. LEONARD SHANNON,
Accountant.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

ST. OURS LOCK.

——	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	....	121,537 65	....	....	....
″ since ″ ..	1868	....	....	1,532 75	753 74
″ ″ ″ ..	1869	....	....	1,755 15	1,399 18
″ ″ ″ ..	1870	....	....	1,458 09	1,006 22
″ ″ ″ ..	1871	....	....	1,414 48	1,210 98
″ ″ ″ ..	1872	....	....	1,565 80	1,263 19
″ ″ ″ ..	1873	....	....	2,076 50	1,575 10
″ ″ ″ ..	1874	....	....	2,219 13	2,363 42
″ ″ ″ ..	1875	....	....	1,362 22	1,245 69
″ ″ ″ ..	1876	....	....	1,403 92	1,601 71
″ ″ ″ ..	1877	....	....	1,533 40	750 80
″ ″ ″ ..	1878	....	....	1,556 65	283 77
″ ″ ″ ..	1879	....	....	1,581 55	456 07
″ ″ ″ ..	1880	....	....	1,614 01	705 54
″ ″ ″ ..	1881	....	....	1,741 97	1,299 77
″ ″ ″ ..	1882	....	....	2,002 71	1,902 41
″ ″ ″ .	1883	....	17,230 32	2,361 65	2,188 08
″ ″ ″ ..	1884	....	5,279 17	2,315 37	1,494 99
″ ″ ″ ..	1885	....	4,700 64	2,271 57	3,652 63
″ ″ ″ ..	1886	....	....	2,311 70	4,143 47
″ ″ ″ ..	1887	....	....	2,175 37	5,864 78
″ ″ ″ ..	1888	....	....	2,216 04	2,801 17
″ ″ ″ ..	1889	....	17,964 45	2,421 14	2,002 63
″ ″ ″ ..	1890	....	24,571 96	2,138 40	1,935 44
″ ″ ″ ..	1891	....	21,696 74	2,011 08	4,460 16
″ ″ ″ ..	1892	....	3,585 34	2,168 44	1,944 33
″ ″ ″ ..	1893	....	....	2,136 66	1,994 34
″ ″ ″ ..	1894	....	....	2,216 68	924 55
″ ″ ″ ..	1895	....	....	2,161 63	915 50
″ ″ ″ ..	1896	....	....	2,094 91	1,678 49
″ ″ ″ ..	1897	....	....	2,135 60	707 06
″ ″ ″ ..	1898	....	....	2,049 67	692 04
″ ″ ″ .	1899	....	....	2,244 12	1,494 93
″ ″ ″ ..	1900	....	1,596 88	2,181 43	2,681 10
″ ″ ″ ..	1901	....	3,610 06	2,128 25	1,681 44
Total	....	*121,537 65	100,235 56	66,558 04	61,074 72

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* Included in the total cost of Chambly Canal and River Richelieu, *see* page 21.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

STATEMENT Showing the amounts expended on Constructions, Renewals, &c.—*Con.*

CHAMBLY CANAL.

——	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	......	634,711 76	......	......	......
" since " ..	1868	......	......	8,312 90	9,355 70
" " " ..	1869	......	......	8,437 22	13,120 97
" " " ..	1870	......	......	8,934 41	20,180 73
" " " ..	1871	......	2,839 85	10,214 71	22,426 33
" " " ..	1872	......	1,906 40	9,628 50	22,327 99
" " " ..	1873	......	759 00	10,390 44	11,789 27
" " " ..	1874	......	2,810 00	11,675 67	16,427 19
" " " .	1875	2,415 00	......	12,201 99	16,306 91
" " " ..	1876	......	......	10,593 14	13,273 56
" " " ..	1877	80 00	......	10,281 78	10,111 32
" " " ..	1878	......	......	10,413 99	6,022 96
" " ..	1879	......	......	11,301 53	8,809 77
" " " .	1880	......	......	11,516 22	12,377 74
" " " ..	1881	......	......	13,950 47	20,705 17
" " " ..	1882	......	31,796 41	16,686 78	16,843 60
" " " ..	1883	......	21,332 36	15,904 38	15,182 24
" " " ..	1884	......	41,640 77	18,448 85	12,003 34
" " " ..	1885	......	21,049 23	18,378 55	13,046 95
" " " ..	1886	......	14,547 27	19,501 28	11,999 77
" " " ..	1887	......	17,911 17	19,053 62	20,071 37
" " " ..	1888	......	65,536 64	20,073 60	11,823 74
" " " ..	1889	......	51,437 87	19,679 22	19,392 18
" " ..	1890	......	23,221 48	19,655 38	14,399 93
" " " ..	1891	......	43,344 41	19,204 76	11,399 93
" " " ..	1892	......	38,353 99	19,665 22	12,976 48
" " " ..	1893	......	21,127 65	19,310 29	12,451 03
" " " .	1894	......	8,567 78	19,040 93	11,920 74
" " " ..	1895	......	6,147 63	19,325 49	11,779 12
" " " ..	1896	......	3,694 63	19,349 65	11,801 12
" " " ..	1897	......	12,665 88	18,754 17	13,128 55
" " " ..	1898	......	13,184 68	17,992 90	12,466 51
" " " ..	1899	......	15,255 42	18,336 50	11,997 51
" " " ..	1900	......	5,448 88	18,397 58	13,995 00
" " " ..	1901	......	1,195 09	18,529 48	17,572 35
		637,206 76			
Less proceeds of sale of piece of land.	......	150 00			
Total	......	*637,056 76	465,774 49	523,141 60	479,487 07

* Chambly Canal and River Richelieu.		
Chambly Canal as above		$ 637,056 76
St. Ours Lock, *see* page 20......		121,537 65
		$ 758,594 41
Less amount deducted at Confederation, *see* Public, Accounts 1868, part i, page 9.		
Government expenditure prior to Confederation.		
Chambly Canal as above	$ 634,711 76	
St. Ours Lock. (*See* page 20).	121,537 65	
	$ 756,249 41	
Returned as an asset in Public Accounts, 1868.	433,807 83	
		322,441 58
Agreeing with Public Accounts, 1901, page xvi......		$ 436,152 83

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

Statement showing the amounts expended on Construction, Renewals, &c.—*Con.*

MURRAY CANAL.

——	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	......	....	....	....	....
" since " ..	1868	....	400 00	....	....
" " " ..	1869	....	....	....	....
" " " ..	1870	....	....	....	....
" " " ..	1871	....	....	....	....
" " " ..	1872	....	....	....	....
" " " ..	1873	....	....	....	....
" " " ..	1874	....	....	....	....
" " " ..	1875	....	....	....	....
" " " ..	1876	....	....	....	....
" " " ..	1877	....	....	....	....
" " " ..	1878	....	....	....	....
" " " .	1879	....	....	....	....
" " " ..	1880	....	....	....	....
" " " .	1881	....	....	....	....
" " " ..	1882	7,135 63	....	....	....
" " " ..	1883	84,071 68	....	....	....
" " " ..	1884	118,187 43	....	....	....
" " " ..	1885	148,902 66	....	....	....
" " " ..	1886	179,704 52	....	....	....
" " " .	1887	142,563 66	....	....	....
" " " ..	1888	146,754 37	....	....	....
" " " ..	1889	215.326 46	....	....	....
" " " ..	1890	106,760 35	....	494 31	....
" " " ..	1891	61,260 49	....	5,137 03	173 53
" " " ..	1892	5,964 22	....	5,803 48	3,505 15
" " " ..	1893	30,838 79	....	5,499 62	5,341 34
" " " ..	1894	....	....	5,667 52	5,295 57
" " " ..	1895	....	....	5,354 97	5,063 49
" " " ..	1896	....	....	5,409 10	5,410 33
" " " ..	1897	....	....	5,526 87	3,966 41
" " " ..	1898	....	....	5,799 94	4,710 23
" " " ..	1899	....	....	5,073 70	3,533 68
" " " ..	1900	....	....	5,613 83	2,777 60
" " " ..	1901	....	....	5,175 74	1,138 15
Total......................	....	*1,247,470 26	400 00	60,556 11	40,915 48

* Agreeing with Public Accounts Balance Sheet, 1901, page xvi.

S. LEONARD SHANNON
Accountant.

Department of Railways and Canals,
Ottawa, October 31, 1901.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

TRENT CANAL.

——	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	....	309,371 31			
" since "	1868				
" " "	1869				
" " "	1870				
" " "	1871				
" " "	1872				
" " "	1873				
" " "	1874				
" " "	1875				
" " "	1876				
" " "	1877				
" " "	1878				
" " "	1879				
" " "	1880	561 50		1,188 92	3,568 89
" " "	1881			2,489 93	2,233 50
" " "	1882		5,836 51	2,011 92	8,115 50
" " "	1883	40,767 16	9,303 66	2,235 50	3,047 42
" " "	1884	120,393 91	6,198 57	2,208 64	5,264 35
" " "	1885	121,382 34		3,303 87	4,653 50
" " "	1886	75,103 30		1,639 75	5,917 88
" " "	1887	179,541 63		1,938 08	6,008 88
" " "	1888	114,879 35		1,770 29	5,151 42
" " "	1889	47,592 13	29,677 92	3,242 05	5,935 94
" " "	1890	58,644 50	11,522 65	3,450 99	730 55
" " "	1891	9,826 49	3,164 81	3,803 66	4,888 98
" " "	1892	4,457 28	6,506 97	3,695 85	4,721 85
" " "	1893	5,962 47	10,838 90	3,739 86	2,087 17
" " "	1894	3,412 32	20,403 93	3,785 47	4,988 59
" " "	1895	53,907 70	21,143 41	4,184 18	3,374 49
" " "	1896	392,976 08	6,185 75	4,349 34	3,329 97
" " "	1897	486,575 70	13,880 37	4,965 39	3,497 90
" " "	1898	351,273 31	8,991 54	5,034 60	4,998 80
" " "	1899	166,611 49	6,179 79	5,048 72	6,454 49
" " "	1900	334,583 01	8,043 39	5,131 52	9,989 26
" " "	1901	284,503 89	10,494 82	5,254 51	13,075 89
Total	.....	3,162,327 37	178,372 99	74,478 04	112,035 22

Total expenditure on Capital account as above		$ 3,162,327 37
LESS—Expenditure prior to Confederation	$ 309,371 31	
" Year 1880	561 50	
		309,932 81
Agreeing with Public Accounts Balance Sheet, 1901, page xvi		$ 2,852,394 56

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

Statement showing the amounts expended on Construction, Renewals, &c.—*Con.*

TAY CANAL.

——	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure since Confederation.	1868	......	......	......	......
" " " ..	1869	......	......	......	......
" " " ..	1870	......	......	......	......
" " ..	1871	......	......	......	......
" " " ..	1872	......	......	......	......
" " " ..	1873	......	......	......	......
" " " ..	1874	......	......	......	......
" " " ..	1875	......	......	......	......
" " " ..	1876	......	......	......	......
" " " ..	1877	......	......	......	......
" " " ..	1878	......	......	......	......
" " " ..	1879	......	......	......	......
" " " ..	1880	......	......	......	......
" " " ..	1881	......	......	......	......
" " " ..	1882	......	748 65	......	......
" " " ..	1883	4,831 80	......	......	......
" " " ..	1884	50,878 12	......	......	......
" " " ..	1885	92,473 97	......	......	......
" " " ..	1886	65,561 51	......	......	......
" " " ..	1887	49,617 92	......	......	......
" " " ..	1888	54,166 57	......	......	......
" " " ..	1889	89,486 18	......	......	......
" " " ..	1890	22,226 23	......	*	*
" " " ..	1891	17,114 78	......	*	*
" " " ..	1892	29,771 65	......	*	*
" " " ..	1893	......	......	*	*
" " " ..	1894	......	......	*	*
" " " ..	1895	......	......	*	*
" " " ..	1896	......	......	*	*
" " " ..	1897	10,720 50	......	*	*
" " " ..	1898	......	......	*	*
" " " ..	1899	......	......	*	*
" " " ..	1900	2,750 00	......	*	*
Total..........................	.....	†489,599 23	748 65	*	*

* Included in Rideau. Canal

† Agreeing with Public Accounts, 1901, page xvi.

S. LEONARD SHANNON,
Accountant.

Department of Railways and Canals,
Ottawa, October 31, 1901.

Statement showing the amounts expended on Construction, Renewals, &c.—*Con.*

SAULT STE. MARIE CANAL.

———	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure since Confederation	1868				
" " "	1869				
" " "	1870				
" " "	1871				
" " "	1872		949 35		
" " "	1873				
" " "	1874				
" " "	1875				
" " "	1876				
" " "	1877				
" " "	1878				
" " "	1879				
" " "	1880				
" " "	1881				
" " "	1882				
" " "	1883				
" " "	1884				
" " "	1885				
" " "	1886				
" " "	1887				
" " "	1888	8,145 06			
" " "	1889	34,018 95			
" " "	1890	176,568 55			
" " "	1891	325,336 33			
" " "	1892	341,474 31			
" " "	1893	589,801 25			
" " "	1894	1,316,529 29			
" " "	1895	466,151 50		3,432 73	
" " "	1896	189,986 59		16,074 70	2,650 17
" " "	1897	200,561 82		15,381 59	7,671 79
" " "	1898	21,004 56		14,389 92	8,172 09
" " "	1899	63,935 48		13,840 24	6,564 40
" " "	1900	27,157 98		13,901 40	13,219 87
" " "	1901	323,353 93	48 39	13,730 93	10,289 18
Total		*4 093,025 60	997 74	90,751 51	48,567 50

* Agreeing with Public Accounts, 1901, page xvi.

S. LEONARD SHANNON,
Accountant.

Department of Railways and Canals,
Ottawa, October 31, 1901.

Statement showing the amounts expended on Construction, Renewals, &c.—*Con.*

SOULANGES CANAL.

——	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	...	....	....	....	....
" since " ..	1868	....	....	....	....
" " " ..	1869	....	....	....	....
" " " .	1870	....	....	....	....
" " " ..	1871	....	....	....	....
" " " ..	1872	....	....	....	....
" " " ..	1873	....	....	....	....
" " " ..	1874	....	....	....	....
" " " ..	1875	....	....	....	....
" " " ..	1876	....	....	....	....
" " " ..	1877	....	....	....	....
" " " ..	1878	....	....	....	....
" " " ..	1879	....	....	....	....
" " " ..	1880	....	....	....	....
" " " ..	1881	....	....	....	....
" " " ..	1882	....	....	....	....
" " . ..	1883	....	....	....	....
" " " ..	1884	....	....	....	....
" " " ..	1885	....	....	....	....
" " " ..	1886	....	....	....	....
" " " ..	1887	....	....	....	....
" " " ..	1888	....	....	....	....
" " " ..	1889	....	....	....	....
" " " ..	1890	....	....	....	....
" " " ..	1891	....	....	....	....
" " " ..	1892	54,235 76	....	....	....
" " " ..	1893	210,336 24	....	....	....
" " " ..	1894	723,380 95	....	....	....
" " " ..	1895	752,016 53	....	....	....
" " " ..	1896	535,939 07	....	....	....
" " " ..	1897	363,126 06	....	....	....
" " " ..	1898	1,016,401 00	....	....	....
" " " ..	1899	1,442,824 22	....	....	....
" " " .	1900	693,806 24	....	6,711 84	5,000 00
" " " ..	1901	462,626 36	115 00	25,154 78	5,888 77
Total.................. .. .	......	*6,254,692 43	115 00	31,866 62	10,888 77

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* Included in total cost of St. Lawrence River and Canals, *see* part ii, page 9.

S. LEONARD SHANNON,
Accountant.

Department of Railways and Canals,
Ottawa, October 31, 1901.

STATEMENT showing amount expended on Construction and Enlargement of Canals, to June 30, 1901.

Canal.	Construction.		Enlargement.		Total.	
	$	cts.	$	cts.	$	cts.
St. Peters	248,762	84	399,784	30	684,547	14
Lachine	2,589,532	85	8,419,876	09	11,009,408	94
Beauharnois	1,636,690	26			1,636,690	26
St. Lawrence River and Canals	18,442	85	2,509,227	48	2,527,670	33
Lake St. Louis			274,750	49	274,750	49
Lake St. Francis			56,961	46	56,961	46
Cornwall	1,945,624	73	4,849,305	25	6,794,929	98
Williamsburg. Farran's Point			797,804	77	8,615,997	65
Galops			4,528,749	43		
Rapide Plat			1,966,301	28		
Williamsburg	1,320,655	54	2,486	63		
Welland	7,693,824	03	16,320,515	98	24,014,340	01
Ste. Anne's	134,456	51	1,035,759	12	1,170,215	63
*Carillon and Grenville	63,053	64	4,119,039	32	4,182,092	96
Culbute	382,906	46			382,906	46
Rideau	4,084,323	37			4,084,323	37
St. Ours	121,537	65			121,537	65
Chambly	637,056	76			637,056	76
Murray	1,247,470	26			1,247,470	26
Trent	3,162,327	37			3,162,327	37
Tay	489,599	23			489,599	23
Sault Ste. Marie	4,093,025	60			4,093,025	60
Soulanges	6,254,692	43			6,254,692	43
	36,123,982	38	45,280,561	60	81,404,543	98

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* Construction by Imperial Government not included, records relating to same were kept in Ordnance Office, Montreal, and were destroyed by fire in 1852.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

* RECAPITULATION—Expenditure on Canals, also showing Revenue received.

——	Year ending June 30.	Capital.	Income.	Staff.	Repairs.	Revenue received.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation, including Imperial Government.	....	20,593,866 13	98,378 46	....	....	....
Government expenditure since Confederation............	1868	33,784 06	95,347 79	113,084 50	101,646 44	403,879 19
" " ..	1869	126,898 20	55 00	116,069 76	118,579 31	400,263 32
" " ..	1870	....	90,355 96	120,403 02	150,176 70	414,687 02
" " ..	1871	....	116,429 54	135,040 81	140,467 52	488,538 76
" " ..	1872	255,645 75	33,289 27	124,137 09	152,086 25	466,847 52
" " ..	1873	256,547 27	127,369 55	148,581 18	186,573 13	486,433 26
" " ..	1874	1,189,591 91	51,037 05	167,194 40	213,613 86	510,755 99
" " ..	1875	1,714,830 37	479 00	168,401 21	203,226 85	414,979 59
" " ..	1876	2,388,733 46	810 75	178,411 80	190,578 45	390,337 04
" " ..	1877	4,131,374 30	22 30	179,661 40	138,448 51	390,857 37
" " ..	1878	3,843,338 62	....	187,521 31	122,251 60	373,814 17
" " ..	1879	3,064,098 61	....	191,892 44	115,349 99	337,675 13
" " ..	1880	2,123,366 34	....	195,039 33	147,167 52	341,598 14
" " ..	1881	2,075,891 65	7,246 69	197,573 62	154,653 63	361,558 17
" " ..	1882	1,593,174 09	55,025 03	224,572 61	187,399 02	325,231 54
" " ..	1883	1,763,001 97	62,503 14	269,415 01	178,617 86	361,604 01
" " ..	1884	1,577,295 42	60,993 99	280,657 29	192,219 38	372,561 69
" " ..	1885	1,504,621 47	58,297 59	280,226 20	201,708 47	321,289 47
" " ..	1886	1,333,324 80	31,984 02	282,323 63	198,251 97	328,977 43
" " .	1887	1,783,698 16	65,983 06	285,172 62	198,888 84	321,784 88
" " ..	1888	1,033,118 34	120,561 59	292,458 76	201,928 93	317,902 04
" " ..	1889	972,918 43	162,015 49	301,040 23	240,261 36	333,188 90
" " ..	1890	1,026,364 24	146,853 54	290,516 63	176,089 00	354,816 92
" " ..	1891	1,318,092 15	165,843 87	294,562 12	204,768 45	349,431 90
" " ..	1892	1,437,149 30	194,129 61	293,115 58	231,089 54	324,475 24
" " ..	1893	2,069,573 30	196,185 84	291,588 97	204,759 39	357,089 87
" " ..	1894	3,027,164 19	109,216 33	294,446 34	179,630 13	387,788 97
" " ..	1895	2,452,273 65	216,057 58	281,477 04	164,033 71	339,890 49
" " ..	1896	2,258,778 97	85,820 49	292,121 05	209,321 60	339,538 72
" " ..	1897	2,348,636 91	101,205 74	287,970 36	178,385 47	384,780 53
" " ..	1898	3,207,249 79	82,400 55	280,872 44	203,478 86	407,652 81
" " ..	1899	3,899,877 31	82,205 60	280,628 57	202,312 36	369,044 38
" " ..	1900	2,639,564 93	120,653 93	292,609 24	227,626 97	322,642 86
" " ..	1901	2,360,699 89	135,500 57	314,095 04	262,876 07	315,425 69
Total..............	..	81,404,543 98	2,874,258 92	7,932,881 60	6,178,457 14	12,717,343 01

*This does not include expenditure which has been charged to Canals,—General—but amounts expended on specified canals.

S. LEONARD SHANNON,
Accountant.

Department of Railways and Canals,
Ottawa, October 31, 1901.

HYDRAULIC AND OTHER RENTS.

Balances due July 1, 1900.	Accrued during the Year ended June 30, 1901.	Totals.	—	Abatement.	Paid into hands of the Collectors.	Balances due June 30, 1901.	Totals.
$ cts.	$ cts.	$ cts.		$ cts.	$ cts.	$ cts.	$ cts.
31,779 31	12.733 76	44,513 07	Welland Canal	3,522 55	9,726 01	31,264 51	44,513 07
1,593 00	1,298 60	2,891 60	Williamsburg Canal		499 00	2,392 60	2,891 60
2,577 50	5,370 00	7,947 50	Cornwall "		5,115 00	2,832 50	7,947 50
8,164 00	3,361 00	11,525 00	Beauharnois "		1,658 50	9,866 50	11,525 00
16,673 31	31,190 02	47,863 33	Lachine "	100 00	30,552 52	17,210 81	47,863 33
375 81	124 00	499 84	Chambly "		73 00	426 84	499 84
3,267 56	3,671 04	6,938 60	Rideau "	0 75	4,356 29	2,581 56	6,938 60
83 00	90 50	173 50	Trent Valley "		28 50	145 00	173 50
	60 00	60 00	Sault Ste. Marie "		55 00	5 00	60 00
4,218 00	636 00	4,854 00	Carillon and Grenville Canal		823 00	4,031 00	4,854 00
	1,500 00	1,500 00	Soulanges Canal		1,500 00		1,500 00
4 00		4 00	Sundry Canals			4 00	4 00
68,735 52	60,034 92	128,770 44	Totals	3,623 30	54,386 82	70,760 32	128,770 44

LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

REVENUE STATEMENT.

Canal Revenue.				Total Canal Revenue Accrued.	Hydraulic and other Rents.	Total.	Collection Division.	Deposits to the Credit of the Receiver General.		Total.	Cost of of Staff, Repairs and Offices of Collection, Chargeable to Revenue.
Tolls.	Wharfage and Storage.	Fines.	Other Receipts.					On Account, Canal Revenue.	On Account, Hydraulic Rents.		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.		$ cts.	$ cts.	$ cts.	$ cts.
....	....	....	....	....	....	....	*Welland Canal.*	....	....	....	163,370 43
68,077 15	....	....	25 66	68,102 81	542 00	68,644 81	Port Colborne	68,102 81	542 00	68,644 81	3,391 70
21,594 93	....	10 00	26 02	21,630 95	1,482 50	23,113 45	Port Dalhousie	21,630 95	1,482 50	23,113 45	2,270 80
529 18	....	....	2 52	531 70	216 00	747 70	Dunnville	531 70	216 00	747 70	790 22
384 00	....	35 00	3 24	422 24	7,480 51	7,902 75	St. Catharines	422 24	7,480 51	7,902 75	210 61
55 40	....	....	....	55 40	5 00	60 40	Chippawa	55 40	5 00	60 40	130 10
90,640 66	....	45 00	57 44	90,743 10	9,726 01	100,469 11	Totals.	90,743 10	9,726 01	100,469 11	170,163 86
....	....	....	....	....	....	....	*t. Lawrence Canals*	....	....	....	236,835 14
300 00	....	....	....	300 00	1,658 50	1,958 50	Beauharnois	300 00	1,658 50	1,958 50	1,025 44
36,926 84	....	5 00	....	36,931 84	5,115 00	42,046 84	Cornwall	36,931 84	5,115 00	42,046 84	1,763 50
477 95	....	30 00	....	507 95	499 00	1,006 95	Cardinal	507 95	499 00	1,006 95	846 80
2,702 88	9 66	....	760 96	3,473 50	....	3,473 50	Lachine	3,473 50	....	3,473 50	2,216 06
24,903 26	1,289 69	20 00	4,543 98	30,756 93	30,552 52	61,309 45	Montreal	30,756 93	30,552 52	61,309 45	7,278 33
24,520 17	....	....	....	24,520 17	....	24,520 17	Kingston	24,520 17	....	24,520 17	694 10
11,819 49	....	3 00	....	11,822 49	1,500 00	13,322 49	Coteau Landing	11,822 49	1,500 00	13,322 49	1,501 04
101,650 59	1,299 35	58 00	5,304 94	108,312 88	39,325 02	147,637 90	Totals.	108,312 88	39,325 02	147,637 90	252,160 41
....	....	....	....	....	....	....	*Chambly Canal.*	....	....	....	40,228 32
10,994 11	....	....	....	10,994 11	....	10,994 11	Chambly	10,994 11	....	10,994 11	1,642 05
12,398 38	....	4 00	....	12,402 38	73 00	12,475 38	St. John's	12,402 38	73 00	12,475 38	1,715 11
578 61	....	....	....	578 61	....	578 61	St. Ours	578 61	....	578 61	624 45
23,971 10	....	4 00	....	23,975 10	73 00	24,048 10	Totals.	23,975 10	73 00	24,048 10	44,209 93
....	....	....	....	....	....	....	*Ottawa Canals*	....	....	....	32,905 13
22,186 10	....	....	....	22,186 10	....	22,186 10	Ottawa	22,186 10	....	22,186 10	....
5,263 98	....	....	....	5,263 98	300 00	5,563 98	Grenville	5,263 98	300 00	5,563 98	474 04
17 60	....	....	24 25	41 85	523 00	564 85	Carillon	41 85	523 00	564 85	663 85
1,064 17	....	....	....	1,064 17	....	1,064 17	St. Anne's Lock	1,064 17	....	1,064 17	689 45
28,531 85	....	....	24 25	28,556 10	823 00	29,379 10	Totals.	28,556 10	823 00	29,379 10	34,732 47

							Rideau Canal				65,128 57
3,153 17	21 96		254 00	3,429 13	4,116 64	7,545 77	Ottawa	3,429 13	4,116 64	7,545 77	2,697 85
876 26				876 26	197 50	1,073 76	Kingston Mills	876 26	197 50	1,073 76	435 79
774 97				774 97	42 15	817 12	Smiths Falls	774 97	42 15	817 12	334 45
4,804 40	21 96		254 00	5,080 36	4,356 29	9,436 65	Totals	5,080 36	4,356 29	9,436 65	68,596 66
3,046 50				3,046 50		3,046 50	*St. Peter's Canal*	3,046 50		3,046 50	3,780 94
							Murray Canal				6,645 09
948 22				948 22		948 22	Brighton	948 22		948 22	335 90
948 22				948 22		948 22	Totals	948 22		948 22	6,980 99
							Trent Valley Canal				18,330 40
93 33			1 60	94 93	1 00	95 93	Burleigh	94 93	1 00	95 93	100 00
506 30			21 00	527 30		527 30	Bobcaygeon	527 30		527 30	56 12
85 31				85 31	10 00	95 31	Fenelon Falls	85 31	10 00	95 31	45 00
20 73				20 73		20 73	Hastings	20 73		20 73	10 00
297 14				297 14	17 50	314 64	Peterborough	297 14	17 50	314 64	15 68
121 57				121 57		121 57	Buckhorn	121 57		121 57	110 00
1,124 38			22 60	1,146 98	28 50	1,175 48	Totals	1,146 98	28 50	1,175 48	18,667 20
					55 00	55 00	*Sault Ste. Marie Canal*		55 00	55 00	25,246 71
254,717 70	1,321 31	107 00	5,663 23	261,809 24	54,386 82	316,196 06		261,809 24	54,386 82	316,196 06	624,536 17
							Dredge Vessels				10,597 32
							Inspection				148 00
							Department of Public Printing and Stationery				1,239 86
							General				2,388 37
254,717 70	1,321 31	107 00	5,663 23	261,809 24	54,386 82	316,196 06	Grand Totals	261,809 24	54,386 82	316,196 06	638,909 72
							Less—Refunds	679 84	90 53	770 37	
							Net Revenue	261,129 40	54,296 29	315,425 69	638,909 72

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

INTERCOLONIAL RAILWAY.

(Including amounts paid to Nova Scotia Railway and European and North American Railway, N.B.)

—	Year.	Construction.	Income.	Working Expenses including Windsor Branch Ry.	Revenue received, including Windsor Branch Ry.
		$ cts.	$ cts.	$ cts.	$ cts.
Expenditure prior to Confederation....	....	10,766,725 54	....	....	....
" since "	1868	483,353 65	....	359,961 08	420,752 58
" " "	1869	282,615 18	....	387,548 47	455,022 76
" " "	1870	1,729,381 49	....	445,208 75	471,245 09
" " " ...	1871	2,916,782 13	....	442,993 31	565,713 52
" " "	1872	5,131,141 51	....	595,076 22	622,900 56
" " "	1873	5,201,450 37	....	1,011,892 60	703,458 26
" " "	1874	3,614,898 81	....	1,847,175 24	893,430 17
" " "	1875	3,426,099 55	....	1,532,589 62	861,593 43
" " "	1876	1,108,321 59	....	1,277,197 79	848,861 46
" " " ...	1877	1,318,352 19	....	1,661,673 55	1,154,445 35
" " "	1878	408,816 74	....	1,811,273 56	1,378,946 78
" " "	1879	226,639 19	....	2,010,183 22	1,294,099 69
" " "	1880	2,048,014 60	....	1,607,956 70	1,520,310 45
" " "	1881	608,732 80	....	1,780,353 53	1,777,856 76
" " "	1882	585,568 79	....	2,080,592 37	2,100,315 85
" " "	1883	1,616,632 96	....	2,383,477 20	2,395,034 99
" " " ...	1884	1,405,377 52	....	2,366,719 95	2,376,666 19
" " " ...	1885	1,195,363 08	....	2,460,229 87	2,392,605 00
" " "	1886	544,958 17	....	2,508,473 10	2,406,858 88
" " " ...	1887	823,070 86	....	2,854,158 91	2,621,337 41
" " " ...	1888	742,203 09	....	3,300,481 94	2,937,337 40
" " "	1889	655,228 13	....	3,174,785 19	2,923,736 46
" " "	1890	365,246 48	....	3,500,455 80	2,958,243 38
" " "	1891	79,929 34	....	3,691,273 65	3,007,630 51
" " "	1892	168,101 77	....	3,458,891 39	2,978,950 82
" " "	1893	228,984 79	....	3,062,207 45	3,099,815 20
" " "	1894	166,362 43	....	2,999,317 07	3,020,485 74
" " "	1895	327,034 51	....	2,964,940 98	2,979,795 59
" " "	1896	259,105 23	....	3,029,304 08	2,994,201 93
" " "	1897	145,142 00	....	2,936,789 71	2,906,631 25
" " "	1898	252,367 20	70,000 00	3,275,830 14	3,154,896 49
" " "	1899	1,081,929 94	210,000 00	3,478,559 30	3,775,558 08
" " " ...	1900	1,796,348 29	....	4,444,296 25	4,599,423 14
" " "	1901	3,633,836 57	....	5,477,285 30	5,019,497 76
Total	....	*55,344,116 49	280,000 00	80,219,153 29	73,617,658 93

* Including $296,872.90 charged to 'Consolidated Fund.'

Total cost of construction as above $55,344,116 49

Less amounts transferred from Capital to Consolidated Fund as follows:—

	Nova Scotia Ry.	European and North American Ry.	
1868..................	$ 16,800 99	$ 11,302 89	
1870..............	34,403 45	1,749 21	
1871..............	50,405 69	....	
1873..............	106,899 59	75,311 08	
	$ 208,509 72	$ 88,363 18	
		208,509 72	
			296,872 90

	$55,047,243 59
Cape Breton Railway, page 35..	3,860,679 14
Oxford and New Glasgow Railway, page 36..	1,949,063 21
Eastern Extension Railway, page 33....	1,324,042 81
Montreal and European Short Line Railway, page 37.	333,942 72
Drummond County Railway, page 41...................	1,459,000 00
Total capital cost of Intercolonial Railway system............	$63,973,971 47
Governor General's car 'Victoria'..	1,290 31
Agreeing with Public Accounts, 1901, page xvi..........................	$63,975,261 78

S. LEONARD SHANNON,
Accountant.

Department of Railways and Canals,
Ottawa, October 31, 1901.

EASTERN EXTENSION RAILWAY.

——	Year.	Capital.	Working Expenses.	Revenue received.
		$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation....	......	....	....	....
" since " ..	1868	....	....	....
" " " ..	1869	....	....	....
" " " ..	1870	....	....	....
" " " ..	1871	....	....	....
" " " ..	1872	....	....	....
" " " ..	1873	....	....	....
" " " ..	1874	....	....	....
" " " ..	1875	....	....	....
" " " ..	1876	....	....	....
" " " ..	1877	....	....	....
" " " ..	1878	....	....	....
" " " ..	1879	....	....	....
" " " ..	1880	....	....	....
" " " ..	1881	....	....	....
" " " ..	1882	....	....	....
" " " ..	1883	....	....	....
" " " ..	1884	1,284,311 97	10,033 77	30,767 66
" " " ..	1885	2,055 92	78,273 65	73,050 01
" " " ..	1886	183 79	94,756 06	66,893 11
" " " ..	1887	....	94.254 04	64,107 10
" " " ..	1888	....	90,954 73	70,552 20
" " " ..	1889	34,235 73	90,719 04	72,436 65
" " " ..	1890	....	79,102 77	84,658 95
" " " ..	1891	3,255 40	*	†
" " " ..	1892	....	*	†
" " " ..	1893	....	*	†
" " " ..	1894	....	*	†
" " " ..	1895	....	*	†
" " " ..	1896	....	*	†
" " " ..	1897	....	*	†
" " " ..	1898	....	*	†
" " " ..	1899	....	*	†
" " " ..	1900	....	*	†
" " " ..	1901	....	*	†
Total..............................	....	‡ 1,324,042 81	538,094 06	462,465 68

* Included in Intercolonial Railway expenses. † Included in Intercolonial Railway revenue.
‡ Included in total cost of Intercolonial Railway system, page 32.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

CARLETON BRANCH RAILWAY.

—	Year.	Capital.	Working Expenses.	Revenue received.
		$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation				
" since "	1868			
" " "	1869			
" " "	1870			
" " "	1871			
" " "	1872			
" " "	1873			
" " "	1874			
" " "	1875			
" " "	1876			
" " "	1877			
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" " "	1879			
" " "	1880			
" " "	1881			
" " "	1882			
" " "	1883			
" " "	1884			
" " "	1885			
" " "	1886	85,610 69		
" " "	1887	2,299 62		
" " "	1888	500 17		
" " "	1889			
" " "	1890			
" " "	1891			
" " "	1892			
" " "	1893			
" " "	1894			
" " "	1895			
" " "	1896			
" " "	1897			
" " "	1898			
" " "	1899			
" " "	1900			
" " "	1901			
Total		*88,410 48		

* 56 Victoria, cap. 6, transfered the Carleton Branch Railway to the city of St. John, N.B., for the sum of $40,000, which sum was paid in March, 1893, to the Receiver General.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

CAPE BRETON RAILWAY.

—	Year.	Capital.	Working Expenses.
		$ cts.	$ cts.
Government expenditure prior to Confederation	1868		
" since "	1869		
" " "	1870		
" " "	1871		
" " "	1872		
" " "	1873		
" " "	1874		
" " "	1875		
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" " "	1884		
" " "	1885		
" " "	1886		
" " "	1887	76,501 89	
" " "	1888	689,450 50	
" " "	1889	1,083,276 60	
" " "	1890	1,170,523 62	
" " "	1891	521,441 62	
" " "	1892	99,936 96	
" " "	1893	59,982 74	
" " "	1894	158,770 61	
" " "	1895	*	
" " "	1896	*	
" " "	1897	405 00	
" " "	1898	389 60	
" " "	1899		
" " "	1900		
" " "	1901		
Total		§3,860,679 14	†

* Included in Intercolonial Railway capital. † Included in Intercolonial Railway working expenses.
§ Included in total cost of Intercolonial Railway system, see page 32.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

OXFORD AND NEW GLASGOW.

—	Year.	Capital.		Working Expenses.	
		$	cts.	$	cts.
Government expenditure prior to Confederation	1868				
" since "	1869				
" " "	1870				
" " "	1871				
" " "	1872				
" " "	1873				
" " "	1874				
" " "	1875				
" " "	1876				
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" " "	1882				
" " "	1883				
" " "	1884				
" " "	1885				
" " "	1886				
" " "	1887				
" " "	1888	280,932	35		
" " "	1889	840,553	57		
" " "	1890	434,074	60		
" " "	1891	220,886	39		
" " "	1892	48,745	23		
" " "	1893	7,922	80		
" " "	1894	112,382	75		
" " "	1895	*			
" " "	1896	*			
" " "	1897	3,565	52		
" " "	1898				
" " "	1899				
" " "	1900				
" " "	1901				
Total		‡ 1,949,063	21	†	

*Included in Intercolonial Railway capital. †Included in Intercolonial Railway working expenses.
‡Included in total cost of Intercolonial Railway system, page 32.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

MONTREAL AND EUROPEAN SHORT LINE RAILWAY.

——	Year.	Construction.	Working Expenses.
		$ cts.	$ cts.
Government expenditure prior to Confederation	1868		
" since "	1869		
" " "	1870		
" " "	1871		
" " "	1872		
" " "	1873		
" " "	1874		
" " "	1875		
" " "	1876		
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" " "	1881		
" " "	1882		
" " "	1883		
" " "	1884		
" " "	1885	49,587 45	
" " "	1886	135,214 38	
" " "	1887	24,157 32	
" " "	1888	397 35	
" " "	1889		
" " "	1890		
" " "	1891	124,568 23	
" " "	1892		
" " "	1893		
" " "	1894	17 99	
" " "	1895		
" " "	1896		
" " "	1897		
" " "	1898		
" " "	1899		
" " "	1900		
" " "	1901		
Total		*333,942 72	

* Included in total cost of Intercolonial Railway system, page 32.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

PRINCE EDWARD ISLAND RAILWAY.

—	Year.	Construction.	Working Expenses.	Revenue received.
		$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation......	......	3,114,735 11	....	....
" since " ...	1874	....	750 00	....
" " " ...	1875	46,086 63	49,344 62	24,493 99
" " "	1876	42,546 10	219,930 43	118,060 96
" " "	1877	200,000 00	228,595 25	130,664 92
" " "	1878	6,551 86	221,599 49	135,899 60
" " "	1879	40,129 05	223,313 12	125,855 91
" " "	1880	16,539 82	164,640 55	113,851 11
" " "	1881	....	203,122 88	131,131 43
" " "	1882	402 03	228,259 97	137,267 54
" " "	1883	57,186 02	252,808 41	146,170 42
" " "	1884	130,663 38	236,428 13	144,504 12
" " " ...	1885	76,956 56	211,207 01	158,588 06
" " "	1886	4,668 33	216,744 34	155,584 36
" " "	1887	5,800 00	204,237 45	155,303 37
" " "	1888	....	229,639 95	158,363 62
" " "	1889	....	247,559 44	171,369 56
" " "	1890	....	266,485 85	160,971 78
" " "	1891	....	257,990 08	174,258 05
" " "	1892	8,300 49	289,706 38	157,442 69
" " "	1893	....	226,422 17	162,690 42
" " "	1894	....	226,891 06	158,533 83
" " "	1895	....	232,905 19	149,654 78
" " "	1896	....	225,138 56	146,476 54
" " "	1897	....	240,489 90	153,443 13
" " "	1898	17,541 88	231,418 74	158,950 61
" " "	1899	22,000 00	218,053 01	165,012 03
" " "	1900	53,546 02	220,931 81	174,738 73
" " "	1901	280,173 93	261,766 24	193,883 48
Total..............................	.....	*4,123,827 21	6,036,380 03	3,963,165 04

* Agrees with Public Accounts Balance Sheet, 1900-1901, page xvi.................................

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

CANADIAN PACIFIC RAILWAY.

—	Year.	Construction, including Subsidy of $25,000,000.	Working Expenses.	Revenue received.
		$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation...	......	....	....	....
" since " ...	1868	....	....	....
" " " ...	1869	....	....	....
" " " ...	1870	....	....	....
" " " ...	1871	30,148 32	....	....
" " " ...	1872	489,428 16	....	....
" " " ...	1873	561,818 44	....	....
" " " ...	1874	310,224 88	....	....
" " " ...	1875	1,546,241 67	....	....
" " " ...	1876	3,346,567 06	....	....
" " " ...	1877	1,691,149 97	....	....
" " " ...	1878	2,228,373 13	....	....
" " " ...	1879	2,240,285 47	....	....
" " " ...	1880	4,044,522 72	78,892 01	104,975 69
" " " ...	1881	4,968,503 93	236,944 98	291,498 06
" " " ...	1882	(1) 4,589,075 79	1,786 20	....
" " " ...	1883	(2) 10,033,800 04	266 09	....
" " " ...	1884	(3) 11,192,722 02	327 02	....
" " " ...	1885	(4) 9,900,281 53	....	....
" " " ...	1886	(5) 3,672,584 81	....	....
" " " ...	1887	(6) 915,057 49	....	....
" " " ...	1888	52,098 65	....	....
" " " ...	1889	86,716 07	....	....
" " " ...	1890	40,980 54	....	....
" " " ...	1891	37,367 00	....	....
" " " ...	1892	66,211 39	....	....
" " " ...	1893	413,836 49	....	....
" " " ...	1894	146,539 87	....	....
" " " ...	1895	49,209 77	....	....
" " " ...	1896	65,669 49	....	....
" " " ...	1897	14,054 50	....	....
" " " ...	1898	692 17	....	....
" " " ...	1899	8,418 53	....	....
" " " ...	1900	236 11	....	....
" " ...	1901	8,978 87	....	....
Total..................	.....	*62,751,794 88	318,216 30	396,473 75

* Agrees with Public Accounts Balance Sheet, 1900-1901, page xx.

(1)	Including	$ 2,210,000 00	on account subsidy.
(2)	"	5,323,076 60	"
(3)	"	7,254,208 27	"
(4)	"	6,862,201 00	"
(5)	"	2,890,427 00	"
(6)	"	460,087 13	"
		†$25,000,000 00	

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† *See* also Statement No. 3, page 47, for this expenditure.

S. LEONARD SHANNON,
Accountant

Department of Railways and Canals,
Ottawa, October 31, 1901.

ANNAPOLIS AND DIGBY RAILWAY.

——	Year.	Capital.	Income Expenses.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" since "	1868		
" " "	1869		
" " "	1870		
" " "	1871		
" " "	1872		
" " "	1873		
" " "	1874		
" " "	1875		
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" " "	1887		
" " "	1888		
" " "	1889	9,847 27	
" " "	1890	381,942 75	
" " "	1891	196,869 36	
" " "	1892	26,189 89	
" " "	1893	2,190 62	
" " "	1894	1,675 36	
" " "	1895	570 55	
" " "	1896		
" " "	1897	41,457 29	
" " "	1898		
" " "	1899		
" " "	1900		
" $ "	1901		8,381 82
Total		*660,683 09	8,381 82

*Of this amount Parliament voted under 52 Vic., chap. 8, the sum of $500,000 as a subsidy to the Western Counties Railway, which is also shown in the statement of subsidies, page 47.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

DRUMMOND COUNTY RAILWAY.

——	Year.	Construction.	Working Expenses.
		$ cts.	$ c.
Government Expenditure prior to Confederation	1868		
" since. "	1869		
" " "	1870		
" " "	1871		
" " "	1872		
" " "	1873		
" " "	1874		
" " "	1875		
" " "	1876		
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" " "	1894		
" " "	1895		
" " "	1896		
" " "	1897		
" " "	1898		
" " "	1899		
" " "	1900	1,459,000 00	
" " "	1901		
Total		*1,459,000 00	

*Included in total cost of Intercolonial Railway system, page 32.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901

STATEMENT Showing Amount Expended on Capital Account on Railways.

Railways.	—	—
	$ cts.	$ c.
Intercolonial	55,047,243 59	
Cape Breton	3,860,679 14	
Oxford and New Glasgow	1,949,063 21	
Eastern Extension	1,324,042 81	
Drummond County	1,459,000 00	63,640,028 75
Carleton Branch		48,410 48
Montreal and European Short Line		333,942 72
Prince Edward Island		4,123,827 21
Canadian Pacific		62,751,794 88
Annapolis and Digby		660,683 09
Governor General's car "Victoria"		1,290 31
Total		131,559,977 44
Memo re Recapitulation—Railways.		
Total cost as per statement above		131,559,977 44
Add amounts transferred from Capital to Consolidated Fund, Intercolonial Railway, see statement, page 32		296,872 90
Agreeing with total cost of construction, as per statement page 43		131,856,850 34

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October, 31 1901.

RECAPITULATION—RAILWAYS.

——	Year.	Construction.	Working Expenses	Revenue Received.
		$ cts.	$ cts.	$ cts.
Government Expenditure prior to Confederation	......	13,881,460 65	....	....
" since "	1868	483,353 65	359,961 08	420,752 58
" " "	1869	282,615 18	387,548 47	455,022 76
" " "	1870	1,729,381 49	445,208 75	471,245 09
" " "	1871	2,946,930 45	442,993 31	565,713 52
" " "	1872	5,620,569 67	595,076 22	622,900 56
" " "	1873	5,763,268 81	1,011,892 60	703,458 26
" " "	1874	3,925,123 69	1,847,925 24	893,430 17
" " "	1875	5,018,427 85	1,581,934 24	886,087 42
" " "	1876	4,497,434 75	1,497,128 22	966,922 42
" " "	1877	3,209,502 16	1,890,268 80	1,285,110 27
" " "	1878	2,643,741 73	2,032,873 05	1,514,846 38
" " "	1879	2,507,053 71	2,233,496 34	1,419,955 60
" " "	1880	6,109,077 14	1,851,489 26	1,739,137 25
" " "	1881	5,577,236 73	2,220,421 39	2,200,486 25
" " "	1882	5,175,046 61	2,310,638 54	2,237,583 39
" " "	1883	11,707,619 02	2,636,551 70	2,541,205 41
" " "	1884	14,013,074 89	2,613,508 87	2,551,937 97
" " "	1885	11,224,244 54	2,749,710 53	2,624,243 07
" " "	1886	4,443,220 17	2,819,973 50	2,628,336 35
" " "	1887	1,846,887 18	3,152,650 40	2,840,747 88
" " "	1888	1,765,582 11	3,621,076 62	3,166,253 22
" " "	1889	2,709,857 37	3,513,063 67	3,167,542 67
" " "	1890	2,392,767 99	3,846,044 42	3,203,874 11
" " "	1891	1,184,317 34	3,949,263 73	3,181,888 56
" " "	1892	417,425 73	3,748,597 77	3,136,393 51
" " "	1893	711,917 44	3,288,629 62	3,262,505 62
" " "	1894	585,749 01	3,226,208 13	3,179,019 57
" " "	1895	376,814 83	3,197,846 17	3,129,450 37
" " "	1896	324,774 72	3,254,442 64	3,140,678 47
" " "	1897	204,624 31	3,195,959 58	3,060,074 38
" " "	1898	270,990 85	3,507,248 88	3,313,847 10
" " "	1899	1,112,348 47	3,696,612 31	3,940,570 11
" " "	1900	3,309,130 42	4,665,228 06	4,774,161 87
" " "	1901	3,922,989 37	5,739,051 54	5,213,381 24
Total	......	*131,895,560 03	87,130,523 65	78,438,763 40

*Total amount paid on construction..	$131,895,560 03
Less amount received from the City of St. John's, N.B., as purchase of the Carleton Branch Railway..	40,000 00
Total cost of construction............	$131,855,560 03
Add expenditure Governor General's car "Victoria"...........................	1,290 31
Agreeing with amount expended on capital, see page 42.............	131,856,850 34

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1900.

STATEMENT showing Miscellaneous Expenditure, yearly, by the Department of Railways and Canals.

Year ending June 30.	Chargeable to Capilal.	Chargeable to Income.			'Chargeable to Revenue.			Total Yearly Expenditure
	Railways.	Canals.	Railways.	General.	Canals.	Railways.	General.	
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1868...				6,305 66	12,000 00		2,416 66	20,722 32
1869...				8,367 52	12,000 00		1,000 00	21,367 52
1870...				7,853 03	18,698 89		7,679 78	34,231 70
1871..				34,773 72	12,018 98			46,792 70
1872...				20,049 50	12,208 76			32,258 26
1873...				36,891 74	12,099 44		6,889 20	55,880 38
1874...				40,098 84	12,959 25		5,428 98	58,487 07
1875...				35,579 24	12,047 43		5,620 17	53,246 84
1876...				42,920 10	86 08		5,690 28	48,696 46
1877...					51 87	43,639 97		43,691 84
1878...		1,860 00			556 00		34,388 59	36,804 59
1879...								
1880...		2,561 55			323 16			2,884 71
1881...		2,338 41			5,535 22			7,873 63
1882...					9,826 23			9,826 23
1883...		11,781 27			6,978 54			18,759 81
1884...		7,486 62	62,256 58		8,305 41			78,048 61
1885...		16,725 47	11,003 38		1,210 61			28,939 46
1886...		20,323 62	10,383 59		776 30			31,483 51
1887...		20,873 21	23,545 34		649 04			45,067 59
1888...		34,533 07	22,898 90		5,799 83			63,231 80
1889...		10,091 87	16,552 64		5,207 64			31,852 15
1890...		16,426 69	50,909 74		49,550 21			116,886 64
1891...		16,925 31	16,314 41		56,922 05			90,161 77
1892...		6,540 49	19,062 51		65,074 07			90,677 07
1893...		8,498 41	4,313 73	28,640 93	63,965 54			105,418 61
1894...		4,178 85	4,855 11	15,746 31	60,265 22			85,045 49
1895...		10,695 48	13,221 27	19,304 87	60,769 56			103,991 18
1896...	1,290 31	10,893 40	5,271 89	25,194 21	70,340 22			112,990 03
1897...		2,937 47	5,118 99	25,142 90	62,777 12		597 39	96,573 87
1898...		1,719 69	8,327 96	28,042 10	56,284 42	1,400 00		95,774 17
1899...		1,318 79	67,005 86	22,085 19	66,850 29			157,260 13
1900...		11,873 35	33,496 99	22,802 18	58,836 57			127,009 09
1901...		12,267 99	28,658 78	33,986 68	61,938 61			136,852 06
	1,290 31	232,851 01	403,197 67	453,784 72	882,912 56	45,039 97	69,711 05	2,088,787 29

S. LEONARD SHANNON
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1901.

RECAPITULATION—RAILWAYS AND CANALS.

Expenditure.

Chargeable to Capital Account—			
Railways, *see* Statement, page 42		$131,559,977 44	
" " " 44		1,290 31	
Canals " " 27		81,404,543 98	
			$212,965,811 73
Chargeable to Consolidated Fund—			
* Railway Subsidies, as per Statement No. 3, page 47			25,737,891 37
Income Account—			
Intercolonial Railway, *see* page 23		$ 280,000 00	
Railways " 44		403,197 67	
Canals " 28	$2,874,258 92		
Less prior to Confederation	98,378 46		
		2,775,880 46	
Canals, *see* page 44		232,851 01	
General " 44		453,784 72	
			4,145,713 86
Revenue Account—			
Canals—Operating and maintaining staff, *see* page 28	$7,932,881 60		
Repairs, *see* page 28	6,178,457 14		
		$14,111,338 74	
Railways—Working expenses, *see* page 43		87,130,523 65	
			101,241,862 39
Total Expenditure on Railways and Canals			$344,091,279 35

Revenue.

Canals—Revenue received from July 1, 1867, to June 30, 1901 (for details *see* page 28)	$12,717,343 01
Railways—Revenue received from July 1, 1867, to June 30, 1901 (for details *see* page 43)	78,438,763 40
Total Revenue, Railways and Canals	$91,156,106 41

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* This amount does not include the annual payment of $119,700 to the Provincial Government of Quebec, being interest at the rate of 5 per cent on the sum of $2,394,000 granted by 47 Vic., ch. 8 (1884), for the line between Ottawa and Quebec, which sum has now been transferred to the public debt as a liability. (*See* Public Accounts, 1898-99, p.x.) This item is dealt with by the Finance Department.

S. LEONARD SHANNON,
Accountant.

Department of Railways and Canals,
Ottawa, October 31, 1901.

1902

PART III.

RAILWAY SUBSIDIES

No. 1.

RAILWAY SUBSIDIES.

TABLE of per mile Cash Subsidies paid in aid of Railway Construction, showing amount of Subsidy granted for same Railways.

Number.	Name of Railway.	On Following Named Railways.				
		No. of miles built up to June 30, 1891.	No. of miles paid and Provided for.	Subsidy paid and available at June, 30, 1901.	Subsidy paid to June 30, 1901.	Subsidy paid to Oct. 10, 1901.
				$ cts.	$ cts.	$ cts.
1	Albert Southern	16	16	50,460 00	50,460 00	50,460 00
2	Baie des Chaleurs	70	70	620,000 00	620,000 00	620,000 00
3	Beauharnois Junction	19·50	19·50	62,400 00	62,400 00	62,400 00
4	Belleville and North Hastings	6·84	6·84	21,888 00	21,888 00	21,888 00
5	Brantford, Waterloo and Lake Erie	18	18	57,600 00	57,600 00	57,600 00
6	Brockville, Westport and Sault Ste. Marie	44·50	44·50	105,200 00	105,200 00	105,200 00
7	Buctouche and Moncton	31·75	31·75	101,600 00	101,600 00	101,600 00
8	Canada Atlantic	54·05	54·05	282,355 20	282,355 20	282,355 20
9	Canada Central	120	120	1,525,250 00	1,525,250 00	1,525,250 00
10	†Canada Eastern	107	107	350,400 00	350,400 00	350,400 00
11	†Canadian Pacific	1,905	1,905	25,000,000 00	25,000,000 00	25,000,000 00
12	" (extension) *	476·55	476·55	5,370,000 00	4,994,574 00	4,994,574 00
13	Caraquet	67	67	224,000 00	224,000 00	224,000 00
14	Central (of New Brunswick)	45·66	89·50	190,400 00	142,400 00	142,400 00
15	Cornwallis Valley	14	14	44,800 00	44,800 00	44,800 00
16	Columbia and Kootenay	27·75	27·75	88,800 00	88,800 00	88,800 00
17	Cumberland	14	14	39,850 00	39,850 00	39,850 00
18	Dominion Lime Co	4·80	4·80	15,360 00	15,360 00	15,360 00
19	Dominion Coal Co	27·44	27·44	87,808 00	87,808 00	87,808 00
20	†Drummond Counties	133·03	135 60	423,936 00	423,936 00	423,936 00
21	Elgin, Petitcodiac and Havelock	12	12	38,400 00	38,400 00	38,400 00
22	Erie and Huron	30	30	96,000 00	96,000 00	96,000 00
23	Esquimalt and Nanaimo	71	71	750,000 00	750,000 00	750,000 00
24	Fredericton and St. Mary's Bridge Co	1·33	1·33	30,000 00	30,000 00	30,000 00
25	Grand Trunk, Georgian Bay and Lake Erie	12·42	12·42	39,744 00	39,744 00	39,744 00
26	Great Eastern	12·50	12·50	40,345 00	40,345 00	40,345 00
27	†Great Northern	140·42	143·59	572,511 11	520,011 11	520,011 11
28	Guelph Junction	15·25	15·25	46,000 00	46,000 00	46,000 00
29	Harvey Branch	3	3	5,553 57	5,553 57	5,553 57
30	Hereford	48·50	48·50	155,200 00	155,200 00	155,200 00
31	Irondale, Bancroft and Ottawa	45	50	160,000 00	144,000 00	144,000 00
32	International	49	49	156,800 00	156,800 00	156,800 00
33	Joggins	12	12	37,500 00	37,500 00	37,500 00
34	Kingston and Pembroke	15	15	48,000 00	48,000 00	48,000 00
35	Kingston, Napanee and Western	61·35	61·35	208,732 80	208,732 80	208,732 80
	Carried forward	3,731·64	3,786·22	37,046,993 68	36,554,967 68	36,554,967 68

TABLE of per mile Cash Subsidies granted and paid in aid of Railway Construction, &c —*Continued.*

Number.	Name of Railway.	On Following Named Railways.				
		No. of miles built up to June 30, 1901.	No. of miles paid and provided for.	Subsidy paid and available at June 30, 1901.	Subsidy paid to June 30, 1901.	Subsidy paid to October 10, 1901.
				$ cts.	$ cts.	$ cts.
	Brought forward.......	3,731·64	3,786·22	37,046,993 68	36,554,967 68	36,554,967 68
36	L'Assomption....................	3·50	3·50	11,200 00	11,200 00	11,200 00
37	Lake Erie and Detroit River........	84·05	84·05	338,731 00	338,731 00	338,731 00
38	Lake Temiscamingue Colonization...	45·84	45·84	310,335 95	310,335 95	310,335 95
39	Leamington and Lake St. Clair......	16	16	51,200 00	51,200 00	51,200 00
40	Lotbinière and Mégantic..........	30	30	96,000 00	96,000 00	96,000 00
41	Montreal and Sorel (now South Shore Ry.)........................	61·50	126·67	444,357 57	213,047 76	213,047 76
42	Montreal and Lake Champlain.......	83	83	103,600 00	103,600 00	103,600 00
43	Montreal and Western..............	70	70	361,270 00	361,270 00	361,270 00
44	Montreal and Lake Maskinongé.....	12·90	12·90	41,280 00	41,280 00	41,280 00
45	Montreal and Ottawa............	60	60	192,000 00	192,000 00	192,000 00
46	Montford Colonization	32·20	33·20	167,440 00	167,440 00	167,440 00
47	Nakusp and Slocan..............	36·90	38	117,760 00	117,760 00	117,760 00
48	New Brunswick and P.E.I.........	35·45	35·45	113,440 00	113,440 00	113.440 00
49	New Glasgow Iron and Coal Co.....	12·45	12·45	39,840 00	39,840 00	39,840 00
50	Northern Pacific Junction..........	110	110	1,320,000 00	1,320,000 00	1,320,000 00
51	Nova Scotia Central................	73·50	73·50	235,200 00	235,200 00	235,200 00
52	Ontario, Belmont and Northern......	9·60	10	30,720 00	30,720 00	30,720 00
53	Ontario and Quebec................	61·25	61·25	196,000 00	196,000 00	196,000 00
54	Orford Mountain..................	26·50	26·50	84,800 00	84,800 00	84,800 00
55	Oshawa Railway and Navigation Co.	7	7	22,400 00	22,400 00	22,400 00
56	Ottawa and Gatineau Valley......	54	86	384,000 00	284,128 00	284,128 00
57	†Ottawa, Arnprior and Parry Sound.	159·58	163	779,712 00	779,712 00	779,712 00
58	Parry Sound Colonization.........	47·75	47·75	152,800 00	152,800 00	152,800 00
59	Pontiac and Pacific Junction........	70	70	331,850 00	193,578 00	193,578 00
60	†Phillipsburg Junction..............	7·41	7·41	23,712 00	23,712 00	23,712 00
61	Pontiac and Renfrew...............	4·25	4·25	13,600 00	13,600 00	13,600 00
62	Port Arthur, Duluth and Renfrew...	84·75	84·75	271,200 00	271,200 00	271,200 00
63	Quebec Central....................	74·86	74·86	348,342 00	348,342 00	348,342 00
64	Quebec and Lake St. John.........	245·85	245·85	1,006,743 50	1,006,743 50	1,006,743 50
65	Quebec, Montmorency and Charlevoix	30	30	96,000 00	96,000 00	96,000 00
66	Shuswap and Okanagan...........	51	51	163,200 00	163,200 00	163,200 00
67	South Norfolk....................	17	17	54,400 00	54,400 00	54,400 00
68	St. Catharines and Niagara Central..	12	12	38,400 00	38,400 00	38,400 00
69	St. Clair Frontier Tunnel..........	2·23	2·23	375,000 00	375,000 00	375,000 00
70	St. Lawrence and Lower Laurentian.	38·85	38·85	217,600 00	217,600 00	217,600 00
71	St. Louis, Richibucto and Buctouche	7	7	22,400 00	22,400 00	22,400 00
72	†St. Lawrence and Adirondack......	33·51	33·51	149,481 60	149,481 60	149,481 60
73	Temiscouata......................	112·95	112·95	645,950 00	645,950 00	645,950 00
74	Thousand Island..................	4·33	4·33	24,400 00	24,400 00	24,400 00
75	†Tilsonburg, Lake Erie and Pacific..	19·41	19·41	69,271 48	69,271 48	69,271 48
76	Tobique Valley..................	27·88	27·88	134,016 00	134,016 00	134,016 00
77	Toronto, Grey and Bruce..........	4·58	4·58	14,656 00	14,656 00	14,656 00
78	†United Counties.................	59	65	188,816 00	188,816 00	188,816 00
79	Waterloo Junction...............	10·25	10·25	32,800 00	32,800 00	32,800 00
80	Western Counties..................	20	20	500,000 00	500,000 00	500,000 00
81	West Ontario Pacific.............	18·75	18·75	60,000 00	60,000 00	60,000 00
82	Cap de la Madeleine...........	2·32	2·32	7,424 00	7,424 00	7,424 00
83	†Gulf Shore	16·78	16·78	53,699 20	53,699 20	53,699 20
84	†St. Stephen and Milltown..........	4·64	4·64	14,848 00	14,848 00	14,848 00
85	†Coast (of Nova Scotia)............	28·25	61	195,200 00	90,400 00	90,400 00
	Carried forward	5,872·46	6,068·88	47,693,989 98	46,627,810 17	46,627,810 17

TABLE of per mile Cash Subsidies granted and paid in aid of Railway Construction, &c.—*Concluded.*

Number.	Name of Railway.	On Following Named Railways.				
		No. of miles built up to June 30, 1901.	No. of miles paid and provided for.	Subsidy paid and available at June 30, 1901.	Subsidy paid to June 30, 1901.	Subsidy paid to October 10, 1901.
				$ cts.	$ cts.	$ cts.
	Brought forward	5,872·46	6,068·88	47,693.989 98	46,627,810 17	46,627,810 17
86	Grand Trunk	Bridge.	Bridge.	500,000 00	500,000 00	500,000 00
87	†Ottawa and New York	53·87	53·87	262,384 00	262,384 00	262,384 00
88	†Restigouche and Western	10	40	78,930 00	46,930 00	46,930 00
89	†East Richelieu Valley	21·86	21·86	69,952 00	69,952 00	69,952 00
90	†Pembroke Southern	20	20	64,000 00	64,000 00	64,000 00
91	†Massawippi Valley	1·68	2·50	5,376 00	5,376 00	5,376 00
92	†Inverness and Richmond	....	53	313,600 00	132,800 00	132,800 00
93	†Canadian Northern	....	290	1,632,000 00	537,600 00	1,237,570 00
94	†Central Ontario	....	21	67,200 00	67,200 00	67,200 00
95	†Midland (Nova Scotia)	40·96	58	219,350 00	170,264 00	170,264 00
96	Quebec Bridge Co	Bridge.	Bridge.	1,000,000 00	74,570 00	121,000 00
97	†St. Mary River	30	30	75,000 00	75,000 00	75,000 00
98	Pontiac and Pacific and Ottawa and Gatineau	Bridge.	Bridge.	212,500 00	212,500 00	212,500 00
99	†Atlantic and Lake Suderior	30	30	96,000 00	....	14,800 00
100	†Montreal and Province Line	19	19	60,800 00	....	32,000 00
101	†York and Carleton	....	5·73	18,336 00	....	18,336 00
	Total	6,050·83	6,713·84	52,369,417 98	‡48,846,386 17	49,657,922 17

‡Add subsidy of used rails as per statement, part iii, page 7, $152,305.20, and Atlantic and North-Western, $2,239,200, less subsidy Canadian Pacific Railway, main line, $25,000,000, and Western Counties Railway, $500,000, which will then agree with statement of subsidies in part ii, page 47, viz., $25,737,891.37.

*Includes the mileage of the North Shore Railway, 160 miles.

†By 60-61 Vic., cap. 4, 62-63 Vic., cap. 7, 63-64 Vic., cap. 8, and 1 Edward VII cap. 7, a subsidy was authorized on certain mileage of this railway, specified in the Act of Parliament, of $3,200 per mile and a further subsidy beyond the sum of $3,200 per mile, of 50 per cent on so much of the *average cost* of the said specified mileage subsidized as in excess of $15,000 per mile, such subsidy not exceeding in the whole the sum of $6,400 per mile.

The amount of certain of the subsidies authorized by Parliament, given in this statement, includes the determined portion of the subsidies under 60-61 Vic., cap. 4, 62-63 Vic., cap. 7, and 63-64 Vic., cap. 8, viz. : The amount produced by the $3,200 per mile, but the other portion is now an undetermined amount, and therefore cannot be shown here.

The following is the mileage of certain of the Railways shown in this statement and subsidized under 60-61 Vic., cap. 4, 62-63 Vic., cap. 7, and 63-64 Vic., cap. 8:—

	Miles.
Ottawa, Arnprior and Parry Sound	56
Phillipsburg Junction	0·66
St. Lawrence and Adirondack	13·50
Tilsonburg, Lake Erie and Pacific	3·50
United Counties	1
Great Northern	44
Gulf Shore	5·50
St. Stephen's and Milltown	1·14
Drummond County	42·50
Coast (of Nova Scotia)	61
Ottawa and New York	53·87
Restigouche and Western	40
East Richelieu Valley	24
Ottawa and Gatineau	86
Pembroke Southern	40
Massawippi Valley	2·50
Inverness and Richmond	93
Canadian Northern	490
Central Ontario	41
Midland (Nova Scotia)	58
Pontiac Pacific Junction	9
Canada Eastern	2·25
Canadian Pacific (Extension)	70

STATEMENT showing Railways receiving Cash Subsidies of fixed amounts, payable Annually or Semi-annually for fixed period of years.

No.	Name of Railway.	Miles. Subsidized.	Amount of Instalment.	Amount paid up to June 30, 1900.
				$
1	International (Atlantic and North-west) Railway Co.	252	$93,300 per ½ year for 20 years	2,239,200
2	Kingston, Smith's Falls and Ottawa Railway Co.	56	$3,136 ″ 21 ″	Nil.
	Total	308		2,239,200

STATEMENT showing railways aided by the Grant of Loans.

No.	Name of Railway.	Amount of Loans authorized.	Amount loaned.
		$	$ c.
1	Albert Railway Co.	15,000	14,725 56
2	Fredericton and St. Mary's Bridge Co.	300,000	300,000 00
3	St. John Bridge and Railway Extension Co	500,000	433,900 00
	Total	815,000	748,625 56

Statement showing Railways subsidized by the Grant of used Iron Rails valued at th amount set forth.

No.	Name of Railway.	Tons of used Rails.	Subsidy on value of Rails.	Subsidy on used Rails paid.
			$ c.	$ c.
1	Central Railway Co. of New Brunswick	4,052	83,612 54	83,612 54
2	Elgin, Petitcodiac and Havelock Ry. Co.	2,201	44,252 82	44,252 82
3	Chatham Branch Railway Co	958	24,439 84	24,439 84
	Total	7,211	152,305 20	152,305 20

Statement showing Railways aided by the Loan of used Iron Rails valued at the amount set forth.

No.	Name of Railway.	Tons of used Rails.	Value of used Rails loaned.	Remarks.
			$ c.	
1	Kent Northern Railway Co	2,549	58,334 27	By 51 Victoria, chapter 3, these used rails will be granted as a subsidy (the section of road to be first laid with new steel rails weighing not less than 50 lbs. per lin. yard and after an O. C. had been passed authorizing transfer).
2	Halifax Cotton Co.	233	4,235 00	
3	Steel Company of Canada	597	11,964 66	
4	Albert Railway Company	726	14,665 45	
	Total	4,105	89,299 38	

STATEMENT showing Railways subsidized by Grants of Lands.

No.	Act authorizing Subsidy.	Name of Railway Company.	Mileage Subsidized.	Acres granted per Mile.	Total Area granted.
1	48-49 Vic., c. 60 50-51 Vic., c. 22 52 Vic., c. 2	Alberta Railway and Coal Co.—Main line, Dunmore to Lethbridge	109·50	6,400	700,800
2	52 Vic., c. 4 52 Vic., c. 3	Alberta Railway and Coal Co.-From Lethbridge to the International Boundary	64·62	6,400	413,568
3	53 Vic., c. 4	Calgary and Edmonton Railway	340·00	6,400	2,176,000
4	44 Vic., c. 1	Canadian Pacific Railway—Main line			18,206,986
5	53 Vic., c. 4	C. P. R.—Deloraine and Napinka Branch.	18·01	6,400	115,264
6	53 Vic., c. 4	C. P. R.—Glenboro' and Souris Branch	45·24	6,400	289,536
7	53 Vic., c. 4 54 Vic., c. 10	C. P. R.—Kenmay and Estevan Branch	156·86	6,400	1,003,904
8	57-58 Vic., c. 6	C. P. R.—Pipestone Branch	31·30	6,400	200,320
9	49 Vic., c. 11	Great North-west Central Railway	50·00	6,400	320,000
10	48-49 Vic., c. 60	Manitoba and North-western Railway—Main line	430·00	6,400	2,918,400
11	49 Vic., c. 11	Manitoba and North-western Railway—Branch from Biscarth	26·00	6,000	
12	53 Vic., c. 4	Manitoba and South-eastern Railway Co.	98·00	6,400	627,200
13	54-55 Vic., c. 10 48-49 Vic., c. 10	Manitoba South-western Colonization Co.	218·25	6,400	1,396,800
14	48-49 Vic., c. 60 50-51 Vic, c. 23	Qu'Appelle, Long Lake and Saskatchewan Railway and Steamboat Co	253·96	6,400	1,625,344
15	52 Vic., c. 4 54 Vic., c. 9	Red Deer Valley Railway and Coal Co	55·00	6,400	352,000
16	57-58 Vic., c. 6	Saskatchewan and Western Railway Co.	15·47	6,400	99,008
17	62-63 Vic., c. 57	Canadian Northern Railway	1,025·00	Div. A., 6,400 do B., 12,800 do C., 6,400	9,280,000
			2,937·21		39,725,130

NOTE.—By 62-63 Victoria (Session of 1899), chapter 57, the Lake Manitoba Railway and Colonization Company and the Winnipeg Great Northern Railway were amalgamated under the title of the Canadian Northern Railway, all the rights of the two companies being vested in the new company.

No. 2

LIST OF RAILWAY SUBSIDY ACTS PASSED IN EACH YEAR.

NOTE.—The marginal number opposite each subsidy has reference to the alphabetical list in the Deputy Minister's report showing the action taken in cases where a contract for work has been made with any company.

By the Acts of Parliament below specified, authority has been placed in the hands of the Governor in Council to grant, upon certain conditions, aid towards the construction of various lines of railway throughout the Dominion, as follows, namely:—

By the Acts of 45 Vic., cap. 14, 1882 *(Assented to 17th May, 1882)*:—

1. For a railway from Gravenhurst to Callander, both in the province of Ontario, a subsidy not exceeding $6,000 per mile, nor exceeding in the whole $660,000

2. For a railway from St. Raymond to Lake St. John, both in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......... 384,000

3. For a railway from a point on the Intercolonial Railway at Rivière du Loup or Rivière Ouelle, in the province of Quebec, or between them, to Edmundston, in the province of New Brunswick, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......... 240,000

4. For a railway from Oxford to New Glasgow, both in the province of Nova Scotia, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......... 224,000

"The said subsidies to be granted to such companies as shall be approved by the Governor in Council as having established, to his satisfaction, their ability to complete the said railways respectively, within a reasonable time, to be fixed by Order in Council, and according to descriptions and specifications to be approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in an agreement to be made by the company with the Government, and which the Government is empowered to make, and to be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each ten miles of railway, proportionate to the value of the portion so completed in comparison with the whole work undertaken, such proportion to be established by the report of the said Minister; provided always, that the granting of such bonuses or subsidies shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting therewith, as the Governor in Council may determine."

By the special Act 45 Vic., cap. 55, 1882 *(Assented to 17th May, 1882*:—

5. A subsidy authorized in favour of "The Chignecto Marine Transport Railway Company," provided that they construct and thereafter maintain and operate a ship railway, to be approved by the Government, across the Isthmus of Chignecto, from the Gulf of St. Lawrence to the Bay of Fundy, per year, for twenty-five years.......... $150,000

By the Act 46 Vic., cap. 25, 1883 *(Assented to 25th May, 1883)*:—

6. To the Baie des Chaleurs Railway Company, for 100 miles of their railway, from Métapediac, on the Intercolonial Railway, to Paspebiac, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......... 320,000

7. To the Caraquet Railway Company, for 36 miles of their railway, from a point near Bathurst to Caraquet, in the province of New Brunswick, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......... $115,200

8. To the Gatineau Valley Railway Company, for the first 50-mile section of their railway, from Hull station, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.. 160,000

9. To the Great American and European Short Line Railway Company, for 80 miles of their railway, from Canso to Louisburg or Sydney, in the province of Nova Scotia, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......... 256,000

10. To the International Railway Company, for 49 miles of their railway, from Sherbrooke, in the province of Quebec, to the international boundary line, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......... 156,800

11. To the Northern and Western Railway Company, for 32 miles of their railway, from the Intercolonial Railway, near the Miramichi, to Moran's, near Demphy village, in the province of New Brunswick, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.. 102,400

12. To the Montreal and Western Railway Company, for the first 50-mile section of their railway, out of St. Jérôme, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole. 160,000

13. To the Napanee, Tamworth and Quebec Railway Company, for 28 miles of their railway, from Napanee to Tamworth, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......... 89,600

14. To the Quebec and Lake St. John Railway Company, for 25 miles of their railway, from St. Raymond to Lake St. John, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......... 80,000

In addition to the subsidy granted by the Act forty-fifth Victoria, chapter fourteen.

15. For a railway from the International Railway at Petitcodiac to Havelock Corner, in the province of New Brunswick, 12 miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......... 38,400

16. For a railway from Gravenhurst to Callander, 110 miles, a subsidy not exceeding $6,000 per mile, nor exceeding in the whole.......... 660,000

In addition to the subsidy granted by the Act forty-fifth Victoria, chapter fourteen.

"The nine subsidies first mentioned to be granted to the companies hereinbefore named respectively; and the two subsidies last mentioned to be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to complete the said railways, respectively; and all the eleven lines above mentioned, and also the lines of railway in respect of which it is provided by the Act of forty-fifth Victoria, chapter fourteen, that subsidies may be granted, shall be commenced within two years from the first day of July next, and completed within a reasonable time, not to exceed four years from and after the passing of this Act, to be fixed by Order in Council, and according to descriptions and specifications to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made by each company with the Government, and which the Government is empowered to make; and all the said subsidies authorized by this Act, respectively, to be paid out of the Consolidated Revenue Fund of Canada by instalments, on the completion of each section of not less than ten miles of railway, proportionate to the value of the portion so completed in comparison with the whole work undertaken, to be established by the report of the said Minister; Provided always, that the granting of such subsidies shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized as the Governor in Council may determine."

By the special Act 46 Vic., cap. 26, 1883 *(Assented to 25th May, 1883)*:—

17. An advance authorized in favour of the "St. John Bridge and Railway Extension Company," to enable them to build a railway bridge across the River St. John, N.B., with railway connection with the Intercolonial, such advance to be secured by a mortgage on their entire property, not to exceed 80 per cent of the expenditure on the work, nor a total sum of.................................$ 500,000

By the Act 47 Vic., cap. 8, 1884 *(Assented to 19th April, 1884)*:—

18. To the Government of the province of Quebec, in consideration of their having constructed the railway from Quebec to Ottawa, forming a connecting line between the Atlantic and Pacific coasts via the Intercolonial and Canadian Pacific Railways, and being as such a work of national and not merely provincial utility, a subsidy not exceeding $6,000 per mile for the portion between Quebec and Montreal, 159 miles, nor exceeding in the whole................. 954,000

19. And for the portion between Montreal and Ottawa, 120 miles, $12,000 per mile, nor exceeding in the whole.........................1,440,000

20. For the construction of a line of railway connecting Montreal with the harbours of St. John and Halifax by the shortest and best practicable route, after the report of competent engineers, a subsidy not exceeding $170,000 per annum, for fifteen years, or a guarantee of a like sum for a like period as interest on bonds of the company undertaking the work.

21. For the construction of a line of railway from Oxford station, on the Intercolonial Railway, to Sydney or Louisburg, a subsidy not exceeding $30,000 per annum for fifteen years or a guarantee of a like sum for a like period as interest on the bonds of the company undertaking the work, in addition to the subsidies previously granted, and also a lease or transfer to such company of the Eastern Extension Railway, from New Glasgow to Canso, with its present equipment.

22. To the Quebec Central Railway Company, for a line of railway from Beauce Junction to the international boundary line, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole............ 211,200

23. For the extension of the Canadian Pacific Railway, from its terminus at St. Martin's Junction, near Montreal, or some other point on the Canadian Pacific Railway, to the harbour of Quebec, in such manner as may be approved by the Governor in Council, a subsidy not exceeding $6,000 per mile, nor exceeding in the whole........... 960,000

24. To the Irondale, Bancroft and Ottawa Railway Company, for a line of railway from the Victoria branch of the Midland Railway to the village of Bancroft, in the township of Dungannon, county of Hastings, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.. 160,000

25. To the Pontiac Pacific Junction Railway, for a line of railway from Hull or Aylmer to Pembroke, provided the Ottawa River is crossed at some point not east of Lapasse, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................... 272,000

26. To the Gatineau Railway Company, for a line of railway from Kazuabazua to Le Désert, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole...................................... 160,000

27. To the Napanee, Tamworth and Quebec Railway Company, for a line of railway from Tamworth to Bogart and Bridgewater, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole............ 70,400

28. To the Montreal and Western Railway Company, for a line of railway from the end of the line subsidized in the now last session of Parliament, towards Le Désert, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	$160,000
29. To the Northern and Western Railway Company, for a line of railway from Fredericton to the Miramichi River, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole (instead of the subsidy proposed in 1883)	128,000
30. To the Erie and Huron Railway Company, for a line of railway from Wallaceburg to Sarnia, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	96,000
31. To the Ontario and Pacific Railway Company, for a line of railway from Cornwall to Perth, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	262,400
32. To the Kingston and Pembroke Railway Company, for a line of railway from Mississippi to Renfrew, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	48,000
33. To the Great Northern Railway Company, for that portion of their railway between St. Jérôme and New Glasgow, in the county of Terrebonne, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	32,000
34. For a line of railway and bridge between the Jacques Cartier Union Railway Junction with the Canadian Pacific Railway and St. Martin's Junction connecting the Jacques Cartier Union Railway with the North Shore Railway proper, a subsidy not exceeding in the whole	200,000
35. For a line of railway from Richibucto to St. Louis, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	22,400
36. For a line of railway from Hopewell to Alma, in the province of New Brunswick, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	51,200
37. For a line of railway from St. Andrew's to Lachute, in the county of Argenteuil, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	22,400
38. For a line of railway from the Grand Piles, on the River St. Maurice, to Lake Edward, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	217,600
39. For a line of railway from Annapolis to Digby, in the province of Nova Scotia, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	64,000
40. For a line of the Central Railway, from the head of Grand Lake to the Intercolonial Railway between Sussex and St. John, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	128,000
41. To the Caraquet Railway Company, for the extension of their line of railway from Caraquet to Shippegan Harbour, in the province of New Brunswick, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	76,800
42. For a branch of the Intercolonial Railway, from Metapediac eastward towards Paspebiac, twenty miles, in the province of Quebec, a sum not exceeding in the whole	300,000
43. For a branch of the Intercolonial Railway, from Derby Station to Indiantown, fourteen miles, a sum not exceeding in the whole	140,000

" The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies, respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established, to his satisfaction, their ability to construct and complete the said railways respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of July next and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, except the line mentioned in the fourth section of this Act,* which shall be commenced within one year, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister. The subsidies to the province of Quebec shall be capitalized, and the interest shall be payable at such time and in such manner as the Government of Canada shall agree upon with the Government of the said province. The two subsidies last mentioned in the list are for works to be constructed by the Government of Canada.

"Provided, always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council may determine."

By the special Act 47 Vic., cap. 6, 1884 *(Assented to 19th April, 1884)*:

44. Relating to an agreement with the province of British Columbia, authority was given, *inter alia*, for the grant of a subsidy to the "Esquimalt and Nanaimo Railway Company" in aid of the construction of a line of railway and telegraph between the points named; such subsidy to be in lands *en bloc* on Vancouver Island, the boundaries being fixed by the Act, and in money $750,000

By the Act 48-49 Vic., cap. 59, 1885 *(Assented to 20th July, 1885)*:

45. To the Ottawa, Waddington and New York Railway and Bridge Company, for a line of railway from Ottawa to Waddington, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole......... 166,400

46. To the New Brunswick and Prince Edward Island Railway Company, for a line of railway from Sackville to the Straits of Northumberland, at or near Cape Tormentine, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................................. 118,400

47. To the Montreal and Sorel Railway Company, for a line of railway from St. Lambert to Sorel, a subsidy not exceeding $1,600 per mile, nor exceeding in the whole.................................. 72,000

48. To the Brockville, Westport and Sault Ste. Marie Railway Company, for a line of railway from Brockville to Westport, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.............. 128,000

49. To the Quebec and Lake St. John Railway Company, for a line of railway from its junction on the North Shore Railway to St. Raymond, upon condition of the company extending their road to a point 50 miles north of St. Raymond, a subsidy not exceeding $3,200 per mile nor exceeding in the whole.................................. 96,000

50. To the Northern and Western Railway Company, for a line of railway from the northern end of the 40 miles subsidized between Fredericton and the Miramichi River by 47 Victoria, chapter 8, to Boiestown, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................................. 19,200

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* The extension of the Canadian Pacific Railway from its terminus at St. Martin's Junction, or some other point on the said railway to the harbour of Quebec.

51.	To the Montreal and Champlain Junction Railway Company, for a line of railway from Brosseau's to Dundee, a subsidy not exceeding $500 per mile, nor exceeding in the whole	$30,000
52.	To the Thunder Bay Colonization Railway Company, for a line of railway from the Murillo station of the Canadian Pacific Railway to the east end of Whitefish Lake, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	92,000
53.	To the Central Ontario Railway Company, for a line of railway from Coe Hill or Rathbun, to Bancroft, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	64,000
54.	To the Belleville and North Hastings Railway Company, for a line of railway from the village of Madoc to the junction with the Central Ontario Railway at Eldorado, a subsidy not exceeding $1,500 per mile, nor exceeding in the whole	10,500
55.	For a line of railway from Long Sault to the foot of Lake Temiscamingue, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	25,600
56.	For a line of railway from a point on the Canada Southern Railway near Comber, to Lake Erie, at or near the village of Leamington, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	44,800
57.	To the Napanee, Tamworth and Quebec Railway Company, for a line of railway from Tamworth towards Bogart and Bridgewater, 16 miles, in lieu of the subsidy granted by 47 Vic., chap. 8, a subsidy of	70,000
58.	To the Gatineau Railway Company, for a line of railway from Hull station towards Le Désert, a distance of 62 miles, in lieu of the subsidies granted by 46 Vic., chap. 25, and 47 Vic., chap. 8, a subsidy of	320,000
59.	For a line of railway from the Grand Piles, on the River St. Maurice, to its junction with Lake St. John Railway, a distance of about 50 miles, in lieu of the subsidy granted by 47 Vic., chap. 8, for a line of railway from the Grand Piles, on the River St. Maurice, to Lake Edward, a subsidy of	217,600
60.	To the Canada Atlantic Railway Company, for a line of railway from Valleyfield to a point one and a half miles west of Johnston's, a subsidy not exceeding $1,600 per mile, and from one and a half miles west of Johnston's to Lacolle; also from the present terminus at Ottawa, to the Chaudiere Falls, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	96,000
61.	For a line of railway from Indiantown via the Miramichi Valley, to its junction with the Northern and Western Railway at or near Boiestown, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	140,800

" The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies, respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways, respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council; and shall also be constructed according to descriptions, specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also, of every line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister.

"Provided always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connected with those so subsidized, as the Governor in Council may determine."

By the Act 48-49 Vic., cap. 58, 1885 *(Assented to 20th July, 1885)*:—

62. For a railway from a point on the Intercolonial Railway at Rivière du Loup or Rivière Ouelle, in the province of Quebec, to Edmundston, in the province of New Brunswick, a subsidy not exceeding two thousand eight hundred dollars per mile for seventy-five miles, and six thousand dollars per mile for eight miles, nor exceeding in the whole two hundred and fifty-eight thousand dollars; the said subsidy to be in addition to the subsidy authorized to be granted in aid of the construction of the said railway by the Act forty-fifth Victoria, chapter fourteen, and constituting with the subsidy so authorized, a subsidy not exceeding in the whole four hundred and ninety-eight thousand dollars, and to be granted for the said railway upon the terms and conditions specified in the said Act, and payable out of the Consolidated Revenue Fund of Canada; and for the purpose of incorporating the persons undertaking the construction of the said railway and those who shall be associated with them in the undertaking, the Governor may grant to them, under such corporate name as he shall deem expedient, a charter conferring upon them the franchises, privileges and powers requisite for the said purposes, which shall be similar to such of the franchises, privileges and powers granted to railway companies during the present session as the Governor shall deem most useful or appropriate to the said undertaking; and such charter being published in the *Canada Gazette*, with any Order or Orders in Council relating to it, shall have force and effect as if it were an Act of the Parliament of Canada.

63. For a line of railway from the south bank of the St. Lawrence river, opposite or near Montreal, to the harbours of St. Andrew's, St. John and Halifax, via Sherbrooke, Moosehead Lake, Mattawamkeag, Harvey, Fredericton and Salisbury, a subsidy not exceeding eighty thousand dollars per annum for twenty years, forming in the whole, together with the subsidy authorized by the Act forty-seventh Victoria, chapter eight, for a line of railway connecting Montreal with the said harbours of St. John and Halifax by the shortest and best practicable route, which the line above described is found to be, a subsidy not exceeding two hundred and fifty thousand dollars per annum, the whole of which shall be paid in aid of the construction of such a line of railway for a period of twenty years, or a guarantee bond of a like sum for a like period as interest on the bonds of the company undertaking the work; the said subsidy to be so granted upon the terms and conditions of and payable out of the Consolidated Revenue Fund in the manner specified in the said last mentioned Act in respect of the subsidy thereby authorized in aid of the said line of railway.

64. The Governor in Council may grant a further subsidy as an aid towards procuring free access as hereinafter described for the trains and traffic of the Canadian Pacific Railway Company from St. Martin's Junction, near Montreal, or from some other point on their railway to be selected by the said company, to the harbour of Quebec, in such a manner as shall be approved by the Governor in Council, that is to say: an additional subsidy not exceeding three hundred and forty thousand dollars, constituting, together with the subsidy authorized by the said last mentioned Act, to aid in procuring the extension of the Canadian Pacific Railway to Quebec, and the subsidy also thereby authorized to aid in constructing a line connecting the Canadian Pacific Railway at the Jacques Cartier Union Junction with the North Shore Railway proper (which subsidies shall be applicable to the said first mentioned purpose) a sum not exceeding in the whole the sum of one million five hundred thousand dollars, payable out of the Consolidated Revenue Fund of Canada.

The said Act further provided as follows in relation to this matter:—

"If it should be expedient so to do in order to facilitate such access, the Governor in Council may acquire the North Shore Railway, and may apply the said sum of one million five hundred thousand dollars, or any part thereof, in aid of such acquisition and upon such acquisition may transfer and convey or lease the said railway to the Canadian Pacific Railway Company, subject to such obligation as the Government shall have assumed in acquiring it."

By the Act 49 Vic., cap. 10, 1886 (*Assented to 2nd June, 1886*):—

65. For a railway from a point at or near Moncton, to Buctouche, in the province of New Brunswick, thirty miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......................... $ 96,000

66. For a railway from Ingersoll via London to Chatham, in the province of Ontario, eighty miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.. 256,000

67. To the Northern and Western Railway Company, for ten miles of their railway, intervening between the termini of the portions of their railway for which subsidies are already granted, the one from Fredericton and the other from Indiantown, and an extension of two miles down to deep water at Chatham, in the province of New Brunswick, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole. 32,000

68. To the Caraquet Railway Company, for ten miles of their railway, from the end of the present subsidized portion at Lower Caraquet to Shippegan, in the province of New Brunswick, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................... 32,000

69. To the Lake Erie, Essex and Detroit River Railway Company, for thirty-seven miles of their railway, from Windsor to Leamington, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.. 118,400

70. To the Thunder Bay Colonization Railway Company, for fifty-six miles of their railway, from the end of the present subsidized section to a point near Crooked Lake, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole............ 179,200

71. To the Parry Sound Colonization Railway Company, for forty miles of their railway, from the village of Parry Sound to the village of Sundridge, on the line of the Northern Pacific Junction Railway, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.. 128,000

72. For a railway from a point at or near New Glasgow or St. Lin, to or near to Montcalm, in the province of Quebec, eighteen miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........... 57,600

73. For a railway from Hereford to the International Railway, in the township of Eaton, in the province of Quebec, thirty-four miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.. 108,800

74. For a railway from St. Félix to Lake Maskinongé, parish of St. Gabriel in the province of Quebec, ten miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole......................... 32,000

75. For a railway from Glenannan to Wingham, in the province of Ontario, five miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.. 16,000

76. For a railway from a point at or near the McCann Station, on the Intercolonial Railway, to the Joggins, onCumberland Basin, in the province of Nova Scotia, twelve miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............................	$ 38,400
77. For a railway from L'Assomption to L'Epiphanie, in the province of Quebec, three miles and a half, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............................	11,200
78. To the Montreal and Western Railway Company, for seventy miles of their railway from St. Jérôme, north-westerly towards Désert, in the province of Quebec, a subsidy of $5,161 per mile, in lieu of the subsidies granted by 46 Vic., chap. 25, and 47 Vic., chap. 8, not exceeding in the whole..............................	361,270
79. For a railway from St. Andrew's to the Canadian Pacific Railway at or at any point east of the town of Lachute, in the county of Argenteuil, in the province of Quebec, seven miles, in lieu of the subsidy granted by 47 Vic., chap. 8, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............................	22,400
80. To the Canada Atlantic Railway Company, for twelve miles of their railway from Clark's Island to Valleyfield, and from Lacolle, in the province of Quebec, to the international boundary, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole............	38,400
81. For a railway from Truro to Newport, in the province of Nova Scotia, forty-nine miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............................	156,800
82. To the Quebec and Lake St. John Railway Company, for ninety-five miles of their railway, from a point fifty miles north of St. Raymond to Lake St. John, in the province of Quebec, a subsidy not exceeding $1,961 per mile, nor exceeding in the whole (in addition to the subsidy granted by 45 Victoria, chapter 14, and 46 Victoria, chapter 25, of $3,200 per mile)..............................	186,295
83. To the Cap Rouge and St. Lawrence Railway Company, for twelve miles of their railway from Lorette via Cap Rouge to Quebec, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............................	38,400
84. For the construction of wharfs and landing stages on the line of the railway from Long Sault to the foot of Lake Temiscamingue, a subsidy of..............................	6,000
85. To the Gananoque, Perth and James Bay Railway Company, seventeen miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............................	54,400
86. For a railway from St. Eustache to St. Placide, county of Two Mountains, eighteen miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............................	57,600
87. For a railway from a point on the Intercolonial Railway through the Stewiacke Valley, on the line which will afford facilities of communication with the Iron Mines, Spring Side, Upper Stewiacke and Musquodoboit settlements, twenty-five miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................	80,000
88. For a railway from Yamaska to the River St. Francis, in the province of Quebec, ten miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............................	32,000
89. For a railway from Perth Centre station, on the New Brunswick Railway, to a point near Plaister Rock Island, in the province of New Brunswick, twenty-eight miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............................	89,600
90. For a railway from Fredericton to the village of Prince William, in the province of New Brunswick, twenty-two miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................	70,400

91. For a railway from a point on the Intercolonial Railway near Newcastle or via Douglastown to a point on the River Miramichi, opposite the town of Chatham, in the province of New Brunswick, six miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	$19,200
92. For a railway from a point on the Canadian Pacific Railway to Eganville, in the province of Ontario, twenty-two miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole............	70,400
93. To the Belleville and North Hastings Railway Company, for seven miles of their railway, from the village of Madoc to the junction with the Central Ontario Railway at Eldorado, in the province of Ontario, a subsidy (in addition to the subsidy of $1,500 per mile granted by 48-49 Victoria, chapter 59), not exceeding $1,700 per mile, nor exceeding in the whole..	11,900
94. To the Napanee, Tamworth and Quebec Railway Company, for eighteen miles of their railway from Tamworth to Tweed, in lieu of the subsidy granted by 48-49 Victoria, chapter 59, a subsidy of...........	70,000
95. To the Albert Railway Company, for their railway from Salisbury to Hopewell, in the province of New Brunswick, which is a feeder to the Intercolonial Railway, in the form of a loan, repayable at such time and secured in such manner as the Governor in Council determines, a subsidy of...	15,000

"The subsidies hereinbefore mentioned as to be granted to the companies named for that purpose shall be granted to such companies respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established, to his satisfaction, their ability to construct and complete the said railways respectively. All the lines for the construction of which subsidies have been granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall be so constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in the agreement to be made in each case by the company to the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council, and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister: Provided always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements, and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council may determine."

By section 2 of this Act authority was given for the grant of a charter by the Governor in Council for the purpose of constructing a railway from Long Sault to the foot of Lake Temiscamingue.

By the Act 50-51 Vic., cap. 24, 1887 *(Assented to 23rd June, 1887)*.

96. To the St. Catharines and Niagara Railway Company, for twelve miles of their railway from the city of St. Catharines to the bridge over the Niagara River, a subsidy not exceeding $3,200 per mile, nor exceedin the whole..	$ 38,400
97. To the Vaudreuil and Prescott Railway Company, for thirty miles of their railway from Vaudreuil towards Hawkesbury, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole............	96,000
98. To the Richmond Hill Junction Railway Company, for five miles of their railway from Richmond Hill Junction, on the Northern Railway of Canada, to Richmond Hill village, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole......................	16,000

99.	To the Drummond County Railway Company, for thirty miles of their railway from Drummondville towards Nicolet, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	96,000
100.	To the Joggins Railway Company, for one and a quarter miles of their railway extending from the southern end of the portion subsidized by the Act 49 Victoria, chapter 10, to the wharfs, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	4,000
101.	To the Moncton and Buctouche Railway Company, for two miles of their railway from the west end of the portion subsidized by the Act 49 Victoria, chapter 10, to Moncton, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	6,400
102.	To the Beauharnois Junction Railway Company, for thirty miles of their railway from St. Martin's towards St. Anicet, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	96,000
103.	To the Harvey Branch Railway Company, for three miles of their railway from the southern terminus of the Albert Railway to Harvey Bank, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	9,600
104.	To the Brantford, Waterloo and Lake Erie Railway Company, for eighteen miles of their railway from the town of Brantford to the village of Hagarsville or the village of Waterford, or some intermediate point on the Canada Southern Railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	57,600
105.	To the Guelph Junction Railway Company, for sixteen miles of their railway from its junction with the Canadian Pacific Railway to the town of Guelph, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	51,200
106.	To the Massawippi Railway Company, for ten miles of their railway from a point on the Atlantic and North-western Railway near the village of Magog, to Ayer's Flat station, on the Massawippi Valley Railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	32,000
107.	To the Napanee, Tamworth and Quebec Railway Company, for four miles of their railway from the north end of the section subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, to Tweed, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	12,800
108.	To the Dominion Lime Company, for seven miles of their railway from a point on the Quebec Central Railway, in the township of Dudswell, to the Dudswell Lime Company's quarries, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	22,400
109.	To the South Norfolk Railway Company, for seventeen miles of their railway from Port Rowan to the town of Simcoe, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	54,400
110.	To the Jacques Cartier Union Railway Company, extending and completing their railway, a subsidy of	20,000
111.	For a line of railway from Mount Forest to Walkerton, twenty-four miles in length, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	76,800
112.	To the Oshawa Railway and Navigation Company, for seven miles of their railway from Port Oshawa towards Raglan, a subsidy not exceeding $3,200 per mile. nor exceeding in the whole	22,400
113.	To the Saguenay and Lake St. John Railway Company, for thirty miles of their railway from Lake St. John towards Chicoutimi, or from Chicoutimi towards Lake St. John, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	96,000

114. To the Great Eastern Railway Company, for thirty miles of their railway from the River St. Francis to the Arthabaska Railway, at St. Grégoire station, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................................... $96,000

115. To the Ontario and Pacific Railway Company, for six miles of their railway from the northern end of the portion subsidized by the Act 47 Victoria, chapter 8, to the town of Perth, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................... 19,200

116. To the Caraquet Railway Company, for seven miles of their railway from Lower Caraquet to Shippegan, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding in the whole.. 32,000

117. To the St. Lawrence and Lower Laurentian and Saguenay Railway Company, for the section of this railway from Grand Piles, on the St. Maurice River, to its junction with the Quebec and Lake St. John Railway, in lieu of the subsidy granted by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, for a line of railway from Grand Piles, on the St. Maurice River, to its junction with the Lake St. John Railway, a distance of about fifty miles, a subsidy of........................ 217,600

118. To the St. John Valley and River du Loup Railway Company, for twenty-two miles of their railway from the village of Prince William towards the town of Woodstock, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.............................. 70,400

119. To the Lake Temiscamingue Railway Company, for four short sections of railway, in all about two miles in length, to overcome the rapids of the Ottawa River, known as "La Mi-Charge," "La Cave," "Les "Erables," and "La Montagne," and for the construction of wharfs and landing stages at these rapids, to connect the Canadian Pacific Railway at Mattawa with Lake Temiscamingue by steamboats, railways and other works (in lieu of a portion two miles in length, out of the eight miles of railway subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, under which about six miles of railway have already been built from the foot of Long Sault proper to the foot of Lake Temiscamingue, and in lieu also of the subsidy granted by the Act 49 Victoria, chapter 10), a subsidy of............................ 12,400

120. To the Carillon and Grenville Railway Company, for twelve miles of their railway from St. Eustache to Sault au Récollet, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole............ 38,400

121. To the Minudie Branch Railway Company, for five and a half miles of their railway from its junction with the Joggins Railway, near the River Hébert railway bridge, to the village of Minudie, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole............ 17,600

122. To the Lake Temiscamingue Colonization and Railway Company, for ten and a half miles of their railway from the Long Sault to Lake Kippewa, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.. 33,600

123. To the Leamington and St. Clair Railway Company, for two miles of their railway from the north end of the section subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, to the village of Comber, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole. 6,400

124. To the Cumberland Railway and Coal Company for fourteen miles of their railway from a point on the Spring Hill and Parrsboro' Railway, near Spring Hill, to a point on the railway between Oxford and New Glasgow, near Oxford village, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........................... 44,800

125. To the Montreal and Champlain Junction Railway Company, a subsidy of	$ 64,000
126. To the Quebec and Lake St. John Railway Company, for nine miles of their railway, the distance which the previous subsidies granted are short of covering from the city of Quebec to Lake St. John, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	28,800
127. To the Temiscouata Railway Company, for thirty miles of a branch of their railway from Edmundston towards the St. Francis River, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	96,000
128. To the Cornwallis Valley Railway Company, for thirteen miles of their railway from Kentville to Kingsport, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	41,600
129. To the Nova Scotia Central Railway Company, for thirty-four miles of their railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	108,800
130. To the Tobique Valley Railway Company, for fourteen miles of their railway from Perth Centre station towards Plaister Rock Island, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, for a railway from Perth Centre station, on the New Brunswick Railway, to a point near Plaister Rock Island, a subsidy of	89,600
131. For a railway from Woodstock towards Centreville, twenty miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	64,000
132. For a railway bridge over the St. Lawrence River, at Coteau Landing on the line of the Canada Atlantic Railway, a subsidy of fifteen per cent on the value of the structure, not to exceed	180,000
133. To the Lake Erie, Essex and Detroit River Railway Company, for twenty-seven miles of their railway, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding	118,400

"For the purpose of granting corporate powers to persons or companies undertaking the construction of railways or parts of railways, mentioned in the next preceding section, for the construction of which no corporate powers exist at the time of the passing of this Act, the Governor in Council may grant to them, under such corporate name as he shall deem expedient, a charter conferring upon them the franchises, privileges and powers requisite for the said purposes, as the Governor in Council shall deem most useful or appropriate to the said undertaking; and such charter being published in the *Canada Gazette*, with any Order or Orders in Council relating to it, shall have force and effect as if it were an Act of the Parliament of Canada.

"The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies respectively; the other subsidies, including subsidies granted for railways over a line extending beyond a point to which any company hereinbefore mentioned by name is authorized to construct their railway, shall be granted to such companies as shall be approved by the Governor in Council, as having established, to his satisfaction, their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council; and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon completion of the work subsidized, except as regards the subsidy for the bridge over the

St Lawrence River, upon which shall be paid fifteen per cent of the value of work done on monthly progress estimates, certified by the Chief Engineer, and upon the approval of the Minister of Railways and Canals.

"The granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

"Notwithstanding anything contained in the Act forty-fifth Victoria, chapter fourteen, or in the Act forty-sixth Victoria, chapter twenty-five, the balances of the sums granted for a railway from St. Raymond to Lake St. John and to the Quebec and Lake St. John Railway Company by the said Acts respectively, which have not yet been paid by the Government, may be paid at any time within one year from the passing of this Act, subject to the conditions in the said Act contained."

By the Act 51 Vic., cap. 3, 1888 (*Assented to 22nd May, 1888*):—

134.	To the Ottawa and Parry Sound Railway Company, for 22 miles of their railway from a point on the Canadian Pacific Railway to Eganville, in lieu of the subsidy granted by 49 Victoria, chapter 10, for a railway from a point on the Canadian Pacific Railway to Eganville, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	$ 70,400 00
135.	To the Nova Scotia Central Railway Company, for 46 miles of their railway, in the province of Nova Scotia, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	147,200 00
136.	To the Montreal and Champlain Junction Railway Company, for 3 miles of their railway from the end of the present subsidized section, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	9,600 00
137.	To the Massawippi Junction Railway Company, for their railway from a point on the Atlantic and North-west Railway, near the village of Magog, to Ayer's Flat station, on the Massawippi Valley Railway, in lieu of the subsidy granted by 50-51 Victoria, chapter 24, a subsidy of	32,000 00
138.	To the Pontiac Pacific Junction Railway Company, for bridging the several channels of the Ottawa River at Culbute and west thereof, a subsidy of $31,500, to be paid out monthly as the work progresses, upon the certificate of the Chief Engineer of Government railways, in the proportion which the value of the work executed bears to the value of the whole work undertaken, and for three miles of their railway extending from a point three miles east of Pembroke to Pembroke, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole $9,600, provided that the entire work subsidized upon this railway shall be completed within four years from the passing of this Act, the subsidy granted by this Act not to exceed in the whole	41,100 00
139.	To the Port Arthur, Duluth and Western Railway Company, for 84¾ miles of their railway from Port Arthur towards Gun Flint Lake, in lieu of the subsidies granted by 48-49 Victoria, chapter 59, and 49 Victoria, chapter 10, for the construction of a railway from Murillo Station to Crooked Lake, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	271,200 00
140.	To the Quebec and Lake St. John Railway Company, for 30 miles of their railway from Lake St. John towards Chicoutimi, or from Chicoutimi towards Lake St. John, being a transfer made at the request of the Saguenay and Lake St. John Railway Company of the subsidy granted to them by 50-51 Victoria, chapter 24, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	96,000 00

141.	To the Temiscouata Railway Company, for 20 miles of their branch railway from Edmundston towards the St. Francis River, in the province of Quebec, in lieu of the subsidy granted by 50-51 Victoria, chapter 24, a subsidy of........................	$100,000 00
142.	To the Quebec Central Railway Company, for the construction and completion of a line of railway from St. Francis Station to a point on the Atlantic and North-west Railway near Moose River, 90 miles, in lieu of the balance of the subsidy, unearned, granted by 47 Victoria, chapter 8, a subsidy not exceeding $21,191.54 per annum for twenty years, or a guarantee of a like sum for a like period as interest on the bonds of the company, such annual subsidy for twenty years representing a grant in cash of..	288,000 00
143.	To the Central Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 4,052 tons of used iron rails and fastenings, loaned to the St. Martin's and Upham Railway Company, now forming part of the Central Railway, which rails and fastenings stand in the Public Accounts as an asset for........................	83,612 54
144.	To the Elgin, Petitcodiac and Havelock Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 2,201 tons of used iron rails and fastenings loaned to the Elgin Branch Railway, now forming part of the Elgin, Petitcodiac and Havelock Railway, which rails and fastenings stand in the Public Accounts as an asset for	44,252 82
145.	To the Kent Northern Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 2,549 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for..............................	58,334 27
146.	To the Halifax Cotton Company of Nova Scotia, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 233 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for..	4,335 00
147.	To the Steel Company of Canada, in Nova Scotia, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company of 597 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for..................................	11,964 66
148.	To the Albert Railway Company of New Brunswick, a grant as a subsidy (the section of road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 726 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for..............................	14,665 45

149.	To the Chatham Branch Railway of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 958 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for	$24,439 84

" All the lines, for the construction of which subsidies are granted, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications, and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council; and also the said subsidies respectively, payable in cash, shall be payable out of the Consolidated Revenue Fund of Canada by instalments, on the completion to the satisfaction of the Minister of Railways and Canals of each section of the railway of not less than 10 miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon completion of the work subsidized."

By the Act 52 Vic., chap. 3, 1889. *(Assented to 2nd May, 1889)*:—

150.	To the Ontario and Pacific Railway Company, for a line of railway from Cornwall to Ottawa, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	$172,400 00
151.	To the Ottawa and Gatineau Railway Company, for a line of railway from Hull station towards Le Désert, a distance of sixty-two miles, a subsidy not exceeding in the whole	320,000 00
152.	To the Cap Rouge and St. Lawrence Railway Company, for twelve miles of their railway, from Lorette via Cap Rouge to Quebec, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	38,400 00
153.	To the Parry Sound Colonization Railway Company, for forty miles of their railway, from the village of Parry Sound to the village of Sundridge, or some other point on the line of the Northern and Pacific Junction Railway, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	128,000 00
154.	For a railway from St. Andrew's to the Canadian Pacific Railway, at or at any point east of the town of Lachute, in the county of Argenteuil, in the province of Quebec, seven miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	22,400 00
155.	For a railway from Truro, or a point between Truro and Stewiacke, to Newport or to Windsor, in the province of Nova Scotia, forty-nine miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	156,800 00
156.	For a line of the Central Railway from the head of Grand Lake to the Intercolonial Railway, in the province of New Brunswick, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	128,000 00
157.	To the Albert Southern Railway Company, the balance remaining unpaid of the subsidy granted by the Act 47th Victoria, chapter 8, not exceeding in the whole	31,771 43
158.	To the Baie des Chaleurs Railway Company, the balance remaining unpaid of the subsidy mentioned in the Act 49th Victoria, chapter 17, not exceeding in the whole	244,500 00

159. To the Irondale, Bancroft and Ottawa Railway Company, for a line of railway from the Victoria Branch of the Midland Railway to the village of Bancroft, in the county of Hastings, the balance remaining unpaid of the subsidy granted by the Act 47th Victoria, chapter 8, not exceeding in the whole..............	$145,000 00
160. To the Northern and Pacific Junction Railway Company, for a railway from Gravenhurst to Callander, the balance remaining unpaid of the subsidies granted by the Act 45th Victoria, chapter 14, and 46th Victoria, chapter 25, not exceeding in the whole..	35,000 00
161. For a railway from some point on the Joggins Railway, near the Hébert River, to Young's Mills, in the province of Nova Scotia, a distance of five miles, a subsidy not exceeding $3,200 per mile, and not exceeding in the whole..........................	16,000 00
162. To the St. Clair Frontier Tunnel Company, for the construction of a tunnel under the St. Clair River, from a point at or near Sarnia, to a point at or near Port Huron, a subsidy not exceeding in the whole..	375,000 00
163. To the Pontiac and Renfrew Railway Company, for six miles of their railway from the north bank of the Ottawa River, opposite Braeside, or from Bristol Iron Mines, to the Pontiac Pacific Junction Railway, near the Quyon River, in the province of Quebec, a subsidy not exceeding $3,200 per mile, and not exceeding in the whole................................	19,200 00
164. To the Quebec, Montmorency and Charlevoix Railway Company, for thirty miles of their railway, from the east bank of the St. Charles River, to or near to Cap Tourmente, in the province of Quebec, a subsidy not exceeding $3,200 per mile, and not exceeding in the whole..	96,000 00
165. To the Fredericton and St. Mary's Bridge Company, for a bridge over the St. John River, at Fredericton, in the province of New Brunswick, a subsidy not exceeding in the whole.............	30,000 00
166. To the Napanee, Tamworth and Quebec Railway Company, for seven miles of their railway, from a point at or near Yarker to a point at or near Harrowsmith, and to a company for three miles of railway from a point at or near Harrowsmith to a point at or near Sydenham, a subsidy not exceeding $3,200 per mile, and not exceeding in the whole..........................	32,000 00
167. For a railway from a point near Sicamous, on the Canadian Pacific Railway, to a point on Lake Okanagan for fifty-one miles of such railway, a subsidy not exceeding $3,200 per mile, and not exceeding in the whole	163,200 00
168. To the Cornwallis Valley Railway Company, for one mile of their railway, from the end of the line subsidized by the Act 50-51 Victoria, chapter 24, to Kingsport, in the province of Nova Scotia, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	3,200 00
169. To the Lake Témiscamingue Colonization and Railway Company, for fifteen miles of their railway, from Mattawa station on the Canadian Pacific Railway, towards the Long Sault, or from the Long Sault towards the said Mattawa station, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	48,000 00
170. To the Maskinongé and Nipissing Railway Company, for fifteen miles of their railway, from a point on the Canadian Pacific Railway at or near Maskinongé or Louiseville, towards the parish of Saint-Michel des Saints, on the River Mattawin, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.............................. ..	48,000 00

171.	To the Kingston, Smith's Falls and Ottawa Railway Company, for twenty miles of their railway, from the city of Kingston towards Smith's Falls, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................	$ 64,000 00
172.	To the South Ontario Pacific Railway Company, for forty-nine and one-half miles of their railway, from Woodstock to Hamilton, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.........................	158,400 00
173.	For a railway from St. Césaire to St. Paul d'Abbotsford, in the province of Quebec, five miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole......................	16,000 00
174.	To the Great Eastern Railway Company, for twenty miles of their railway, from the east end of the line subsidized by the Act 50-51 Victoria, chapter 24, at St. Grégoire, towards the Chaudière Junction station on the Intercolonial Railway, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................................	64,000 00
175.	To the Drummond County Railway Company, for four and one-half miles of their railway, from the end of the line subsidized by the Act 50-51 Victoria, chapter 24, to Ball's Wharf, on the St. Lawrence River, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........	14,400 00
176.	To the St. Catharines and Niagara Central Railway Company, for twenty miles of their railway, from the end of the line subsidized by the Act 50-51 Victoria, chapter 24, at St. Catharines, towards the city of Hamilton, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........	64,000 00
177.	To the Quebec and Lake St. John Railway Company, for twenty miles of their railway, from the end of the section of thirty miles from Lake St. John towards Chicoutimi, subsidized by the Act 51 Victoria, chapter 3, towards Chicoutimi, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..................................	64,000 00
178.	To the Grand Trunk, Georgian Bay and Lake Erie Railway Company, for fifteen miles of their railway, from the village of Tara or some point between Tara and Hepworth, to the town of Owen Sound, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............	48,000 00
179.	To the Hereford Railway Company, for fifteen miles of their railway, from Cookshire to a junction with the Quebec Central Railway at Dudswell, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........	48,000 00
180.	To the Massawippi Junction Railway Company, for fifteen miles of their railway, from Ayer's Flat to Coaticook, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................................	48,000 00
181.	To the Brockville, Westport and Sault Ste. Marie Railway Company, for twenty miles of their railway, from a point at or near Newboro', towards Palmer's Rapids, in the province of Ontario,a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	64,000 00
182.	To the Thousand Islands Railway Company, for four miles of their railway, from a point near the St. Lawrence River, in Gananoque village, to Gananoque Junction of the Grand Trunk Railway, and for thirteen miles of their railway, from Gananoque Junction of the Grand Trunk Railway to a junction with the Brockville, Westport and Sault Ste. Marie Railway, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	54,400 00

183. For a railway from Cape Tourmente towards Murray Bay, twenty miles, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........................	$64,000 00
184. To the Amherstburg, Lake Shore and Blenheim Railway Company, for twenty miles of their railway, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	64,000 00

"So much of the subsidy of three thousand two hundred dollars per mile, which under the provisions of the Act forty-ninth Victoria, chapter seventeen, and of this Act, may be paid to the Baie des Chaleurs Railway Company in respect of the thirty miles of their railway, from the seventieth to the hundredth mile, eastward from Metapediac, shall be applicable to the section of the said railway, comprised between the fortieth and the seventieth mile thereof, eastward from Metapediac, instead of to the said first mentioned section of thirty miles, making six thousand four hundred dollars per mile applicable to the secondly mentioned section of thirty miles; but the foregoing provision shall be subject to the condition that the said company undertake to complete the thirty miles of their railway from the seventieth to the hundredth mile eastward from Metapediac within a reasonable time, not to exceed four years, to be fixed by Order in Council, and without any further subsidy from the Government of Canada, and that they deposit with the Minister of Railways and Canals, as security to the Crown that they will well and truly carry out their undertaking, their bonds to the amount of two hundred thousand dollars.

"The subsidies hereinbefore mentioned as to be granted to companies named for that purpose, shall be granted to such companies respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized, except as respects the tunnel under the St. Clair River, in which case there shall be paid fifteen per cent of the value of work done on monthly progress estimates, certified by the Chief Engineer, and upon the approval of the Minister of Railways and Canals.

"The granting of such subsidies, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

"And for the removal of doubts it is hereby declared and enacted that the provision in the Act passed in the fifty-first year of Her Majesty's reign, and chaptered three, relating to the Pontiac Pacific Junction Railway Company, extended and extends the several subsidies in aid of the said company for four years from the passing of the said Act, that is to say, from the twenty-second day of May, one thousand eight hundred and eighty-eight."

By the Special Act, 52 Vic., cap. 5, 1889 *(Assented to 2nd May, 1889)*:—

185. In order to enable the Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company to complete their railway from Regina to some point on the South Saskatchewan River at or near Saskatoon, and thence northward to Prince Albert, the Governor in Council may enter into a contract with such company for the transport of men, supplies, materials and mails, for twenty years, and may pay for such services during the said term, eighty thousand dollars per annum in manner following, that is to say:—the sum of fifty thousand dollars to be paid annually on the construction of the railway to a point at or near Saskatoon, such payment to be computed from the date of the completion of the railway to such point; and the remaining thirty thousand dollars annually on the extension of the railway to Prince Albert, such payment to be computed from the date of such last mentioned completion: Provided that if the second portion of the said railway is not built and operated to Prince Albert within two years after the completion of the railway to the South Saskatchewan as aforesaid, the payment of fifty thousand dollars shall cease until the whole railway is finished to Prince Albert.

By the Act 53 Vic., cap. 2, 1890 *(Assented to 16th May, 1890)*:—

186. To the Montreal and Ottawa Railway Company, for thirty miles of their railway, from the western end of the thirty-six miles subsidized by the Act 50-51 Victoria, chapter 24, towards Ottawa, a subsidy not exceeding $3,200 per mile, and not exceeding in the whole....................................	$ 96,000
187. To the Waterloo Junction Railway Company, for eleven miles of their railway, from Waterloo to Elmira, a subsidy not exceeding $3,200 per mile, and not exceeding in the whole.............	35,200
188. To the Northern and Pacific Junction Railway Company, for a railway from Gravenhurst to Callander, the balance remaining unpaid of the subsidies granted by the Acts 45 Victoria, chapter 14, and 46 Victoria, chapter 25, not exceeding in the whole...	600
189. For a railway from Woodstock via London to Chatham, in the province of Ontario, thirty miles in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, for a railway from Ingersoll via London to Chatham, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..........................	256,000
190. To the St. Catharines and Niagara Railway Company, for fourteen miles of their railway, from the end of the twenty miles subsidized by the Act 52 Victoria, chapter 3, to Hamilton, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	44,800
191. To a railway from Ottawa to Morrisburg, fifty-two miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.....	166,400
192. To the Erie and Huron Railway Company, for twenty-two miles of their railway from Petrolea via Oil Springs to Dresden, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	70,400
193. To the Brockville, Westport and Sault Ste. Marie Railway Company, for a railway from Brockville to Westport, the balance remaining unpaid of the subsidy granted by the Act 48-49 Victoria, chapter 59, not exceeding in the whole....................	83,000
194. To the Manitoulin and North Shore Railway Company, for thirty miles of their railway from Little Current to the Algoma Branch of the Canadian Pacific Railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.............	96,000
195. To the Port Arthur, Duluth and Western Railway Company, for five miles of their railway, being a branch of the main line of railway to the Kakabeka Falls, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........................	16,000
196. To the Lake Erie and Detroit River Railway Company, for fifty miles of their railway, on a line to be fixed by the Governor in Council, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole....................................	160,000

197. To the Lindsay, Bobcaygeon and Pontypool Railway Company, for sixteen miles of their railway, from Bobcaygeon to the Midland Railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................................. $ 51,200

198. To the Kingston, Smith's Falls and Ottawa Railway Company, for thirty-six miles of their Railway, from the north-east end of the twenty miles subsidized by the Act 52 Victoria, chapter 3, to Smith's Falls, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................................. 115,200

199. To the Ottawa and Parry Sound Railway Company, for thirty miles of their railway, from Eganville to Barry's Bay, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..... 96,000

200. To the Belleville and Lake Nipissing Railway Company, for thirty miles of their railway, from Belleville to Tweed and thence to Bridgewater, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................................ 96,000

201. To the Cobourg, Northumberland and Pacific Railway Company, for thirty miles of their railway from Cobourg to the Ontario and Quebec Railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................................ 96,000

202. To the St. Stephen and Milltown Railway Company, for three and a half miles of their railway, from the town of St. Stephen to the town of Milltown, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole............................ .. 11,200

203. To the Woodstock and Centreville Railway Company, for six miles of their railway, from the western end of the twenty miles subsidized by the Act 50-51 Vic., chap. 24, to the International boundary between the province of New Brunswick and the state of Maine, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................................... 19,200

204. For a railway from a point at or near Fredericton, via Oromocto and Gagetown, to a point on the New Brunswick Railway west of Westfield station, for thirty miles thereof, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........ 96,000

205. To the Central Railway Company of New Brunswick, for four and a half miles of their railway, the distance which the previous subsidy granted is short of covering, from the head of Grand Lake to the Intercolonial Railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.............. 14,400

206. To the Montreal and Western Railway Company, for seventy miles of their railway, from St. Jérôme, north-westerly towards Désert, in the province of Quebec, in lieu of the subsidy granted by the Act 49 Vic., chap. 10, a subsidy not exceeding $5,161 per mile, nor exceeding in the whole................ 361,270

"Provided, that the subsidy hereby granted to the Montreal and Western Company may be paid by instalments on the completion of each section of the railway as follows, that is to say:—

SECTIONS.	Approximate length in miles.
St. Jérôme to Shawbridge	8
Shawbridge to St. Sauveur	4
St. Sauveur to Ste. Adèle	6
Ste. Adèle to Lac à la Fourche	6
Lac à la Fourche to Ste. Agathe	6½
Ste. Agathe to St. Faustin	14
St. Faustin to St. Jovite	7½
St. Jovite to Summit Lake	8
Summit Lake to La Chute aux Iroquois	7
La Chute aux Iroquois towards Désert	3

" Such instalments to be proportionate to the value of the portions so completed in comparison with that of the whole work undertaken, to be established as aforesaid."

207.	For seventy-five miles of the railway from Shelburne, in the county of Shelburne, and from Liverpool, in the county of Queen's towards Annapolis, in the province of Nova Scotia, to be so contracted for as to secure the construction to both Shelburne and Liverpool, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	$ 240,000
208.	To the Inverness and Richmond Railway Company, for fifty miles of their railway from Port Hawkesbury to Broadcove, a subsidy not exceeding $1,000 per mile, nor exceeding in the whole.....	50,000
209.	To the International Railway Company, for a railway from Sherbrooke to the international boundary, the balance remaining unpaid of the subsidy granted by the Act 46 Vic., chapter 25, not exceeding in the whole................................	3,840
210.	For completing the Montreal and Sorel Railway from St. Lambert to Sorel..	40,000
211.	To the Pontiac Pacific Junction Railway Company, for seven and a half miles of their railway, from Hull to Aylmer, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.....	24,000
212.	To the Montreal and Lake Maskinongé Railway Company, for three and a half miles of their railway, the distance which the subsidy granted by the Act 49 Vic., chapter 10, is short of covering from St. Félix to Lake Maskinongé, in the parish of St. Gabriel, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	10,200
213.	To the Great Eastern Railway Company, for a bridge over the Nicolet River, and also a bridge on the St. Francis River, a subsidy of 15 per cent on the value of the structure, not to exceed..	37,500
214.	To the Drummond County Railway Company, for twenty-four miles of their railway, from Drummondville to Ste. Rosalie, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................................	76,800
215.	To the Great Northern Railway Company, for fifteen miles of their railway, from, at or near Montcalm to the Canadian Pacific Railway, between Joliette and St. Félix de Valois, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........	48,000
216.	To the Lake Temiscamingue Colonization Railway Company, for twenty miles of their railway, from the northern end of the fifteen miles subsidized by the Act 52 Vic., chapter 3, to the Long Sault, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole....................................	64,000
217.	To the Maskinongé and Nipissing Railway Company, for fifteen miles of their railway, from the northern end of the 15 miles subsidized by the Act 52 Victoria, chapter 3, towards the parish of St. Michel des Saints, on the River Mattawa, in the province of Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................................	48,000
218.	To the St. Lawrence and Adirondack Railway Company, for eighteen miles of their railway, from Valleyfield to Huntingdon, on the Montreal and Champlain Junction Railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.....	57,600
219.	To the Quebec Central Railway Company, for ninety miles of their railway, from St. Francis Station, on the Quebec Central Railway, to a point on the Atlantic and North-western Railway,	

	near Moose River, or from a point on the Quebec Central Railway between the Chaudière River and Tring Station, to a point on the International Railway at or near Lake Megantic, in lieu of the subsidy granted by the Act 51 Victoria, chapter 3, a subsidy not exceeding $21,191.54 per annum for twenty years, or a guarantee of a like sum for a like period, as interest on the bonds of the company, such annual subsidy for twenty years representing a grant in cash of........................	$288,000
220.	To the Quebec and Lake St. John Railway Company, for a railway bridge over the St. Charles River, to give access to the city of Quebec, a subsidy not to exceed in the whole $30,000; also for twelve miles of their railway from Lorette via Charlesbourg to Quebec, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole $38,400............................	68,400
221.	For a railway from Summerside to Richmond Bay, in the province of Prince Edward Island, three miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole...........	9,600
222.	To the Columbia and Kootenay Railway Company, for thirty-five miles of their railway, from the outlet of Kootenay Lake to a point on the Columbia River as near as practicable to the junction of the Kootenay and Columbia Rivers, a subsidy not exceeding $3,200 per mile, nor to exceed in the whole.........	112,000
223.	For a railway from a point on the Intercolonial Railway through the Stewiacke Valley on a line which will afford facilities of communication with the Iron Mines, Springside, Upper Stewiacke and Musquodoboit settlements, twenty-five miles, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.....	80,000
224.	For a railway from Fredericton to the village of Prince William in the province of New Brunswick, twenty-two miles, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	70,400
225.	To the St. John Valley and Rivière du Loup Railway Company, for twenty-two miles of their railway from the village of Prince William towards the town of Woodstock, in lieu of the subsidy granted by the Act 50-51 Victoria, chapter 24, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........	70,400
226.	To the Témiscouata Railway Company, for sixteen miles of their railway, from the west end of the twenty miles of their branch railway from Edmundston, subsidized by the Act 51 Victoria, chapter 3, towards the St. Francis River, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.............	51,200
227.	For a railway from the north end of the fourteen miles for which a subsidy was granted by the Act 50 and 51 Victoria, chapter 24, to the Tobique Valley Railway Company, from Perth Centre towards Plaister Rock Island, eleven miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	35,200
228.	To the Orford Mountain Railway Company, for thirty-one miles of their railway, between Eastman and Kingsbury, a subsidy not exceeding $3,200 per mile, nor exceedingin the whole	99,200
229.	For a railway from Lachine Bank, on a line of the Grand Trunk Railway, to a point at or near Rivière des Prairies, a distance of fifteen miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	48,000

"The subsidies hereinbefore mentioned as to be granted to companies named for that purpose, shall be granted to such companies respectively; the other subsidies, including subsidies granted for railways over a line extending beyond a point to which any company hereinbefore mentioned by name is authorized to construct its railway, shall be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of July next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council,—except the Erie and Huron Railway, which shall be completed within two years from the first day of July next. And they shall also be constructed according to descriptions and specifications, and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specifying an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make. The location, also, of every such line of railway shall be subject to the approval of the Governor in Council. And all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized—except as regards the Erie and Huron Railway Company, upon which payment shall be made only upon the completion of the work—except, also as regards the subsidies to the Inverness and Richmond Railway, which shall be paid on the completion of each ten mile section, in accordance, as nearly as practicable, with the agreement between the company and the municipality of Inverness, and with section four of the Act of the Legislature of Nova Scotia, 1890, intituled: An Act to enable the county of Inverness to borrow money—except, also, as regards the subsidies to the Great Eastern Railway Company for bridges over the Nicolet and St. Francis Rivers, and to the Quebec and Lake St. John Railway for the bridge over the St. Charles River, upon which shall be paid fifteen per cent of the value of work done, on monthly progress estimates certified by the Chief Engineer and upon the approval of the Minister of Railways and Canals—and except also the subsidy granted to the Quebec Central Railway Company, the first annual payment upon which shall be made at the end of twelve months from the date of the Chief Engineer's certificate of the completion of the work, and each subsequent payment at the end of each twelve months thereafter, for the term of twenty years.

"The granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing running powers or traffic arrangements or other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those subsidized, as the Governor in Council determines."

By the special Act 53 Vic., ch. 5, 1890 *(Assented to 16th May, 1890)*:—

230. In order to enable the Calgary and Edmonton Railway Company to construct so much of their railway as reaches from a point on the line of the Canadian Pacific Railway Company within the town of Calgary to a point on the North Saskatchewan River near Edmonton, the Governor in Council may enter into a contract with such company for the transport of men, supplies, materials and mails for twenty years, and may pay for such services during the said term, eighty thousand dollars per annum, in manner following, that is to say: the sum of eighty thousand dollars to be paid annually on the construction of the railway from Calgary to a point on the North Saskatchewan River near Edmonton,—such payment to be computed from the date of the completion of the railway between such points: Provided that the Governor General in Council may order such sums to be paid in semi-annual instalments, and may permit the company to assign the same by way of security for any bonds or securities which may be issued by the company in respect of the company's undertaking.

By 54-55 Victoria, ch. 8, 1891 (*Assented to 30th Sept., 1891*):—

231. To the Great Northern Railway Company, for a railway from a point at or near New Glasgow or St. Lin to or near to Montcalm, in the province of Quebec, eighteen miles, the balance

	remaining unpaid of the subsidy, not exceeding $3,200 per mile, granted by the Act forty-ninth Victoria, chapter ten, nor exceeding in the whole....................................	$ 28,100 00
232.	To the Quebec and Lake St. John Railway Company, for the railway bridge over the St. Charles River to give access to the city of Quebec, the difference between the amount already paid to the company and the sum of $30,000 mentioned as not to be exceeded by the Act fifty-third Victoria, chapter two, a subsidy not exceeding..	5,250 00
233.	To the Oshawa Railway Company, for seven miles of their railway from Port Oshawa towards Raglan, in lieu of the subsidy for a like amount granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............................	22,400 00
234.	To the St. Lawrence, Lower Laurentian and Saguenay Railway Company, for the section of their railway from Grand Piles, on the St. Maurice River to its junction with the Quebec and Lake St. John Railway, the balance remaining unpaid of the subsidy granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, not exceeding in the whole..................................	92,784 00
235.	To the Great Eastern Railway Company, for thirty-miles of their railway, from the River St. Francis to the Arthabaska Railway at St. Grégoire station, the balance remaining unpaid of the subsidy, not exceeding $3,200 per mile, granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, not exceeding in the whole..	79,700 00
236.	To the South Ontario Pacific Railway Company, for forty-nine and one-half miles of their railway from Woodstock to Hamilton, in the province of Ontario, in lieu of the subsidy for a like amount granted by the Act fifty-second Victoria, chapter three, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	158,400 00
237.	To the Montreal and Ottawa Railway Company (formerly the Vaudreuil and Prescott Railway Company), for thirty miles of their railway from Vaudreuil towards Hawkesbury, the balance remaining unpaid of the subsidy granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, not exceeding in the whole..	46,040 00
238.	To the Tobique Valley Railway Company, for fourteen miles of their railway from Perth Centre station towards Plaister Rock Island, in lieu of the subsidy for a like amount granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, a subsidy not exceeding $6,400 per mile, nor exceeding in the whole....	89,600 00
239.	To the Kingston, Smith's Falls and Ottawa Railway Company for fifty-six miles of their railway from the city of Kingston to Smith's Falls, in lieu of the subsidies, not to exceed $179,200, granted by the Acts fifty-second Victoria, chapter three, and fifty-third Victoria, chapter two, a subsidy not exceeding $12,534 per annum, to be paid in semi-annual instalments of $6,267 each, for twenty years, which represents a grant in cash of..	179,200 00

"Provided, that upon the completion of twenty-eight miles of the said railway a semi-annual subsidy may be paid proportionate to the value of the portion so completed in comparison with that of the whole fifty-six miles; Provided also, that the company may deposit with the Minister of Finance and Receiver General a sum not exceeding $1,170,000, in consideration whereof there shall be paid to the company, for twenty years, a semi-annual annuity calculated on a basis of three and one-half per cent on the amount so deposited; Provided further, that the Governor in Council may permit the company to assign the said subsidy and annuity to trustees by way of security for any bonds or securities which may be issued by the company in respect of their undertaking."

240. To the Brockville, Westport and Sault Ste. Marie Railway Company, for twenty miles of their railway, from a point at or near Newboro' towards Palmer's Rapids, in the province of Ontario, in lieu of a subsidy for a like amount granted by the Act fifty-second Victoria, chapter three, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........................ $64,000 00

"Provided that the subsidy hereby granted to the Brockville, Westport and Sault Ste. Marie Railway Company may be paid by instalments, on the completion of each section of the railway as follows, that is to say:—

Sections.	Length in miles.
From, at or near Newboro' to Westport....................	4
From Westport towards Palmers Rapids....................	16

"The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council; and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also of every such line of railway, shall be subject to the approval of the Governor in Council; and all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized—except as to the subsidy granted to the Kingston, Smith's Falls and Ottawa Railway Company, the first semi-annual payment upon which shall be made at the end of six months from the date of the Chief Engineer's certificate of the completion of twenty-eight miles of the railway, and each subsequent payment at the end of each six months thereafter, for the term of twenty years,—except also as to the Quebec and Lake St. John Railway Company, the subsidy to which shall be paid upon the completion of the work,—except also as to the Brockville, Westport and Sault Ste. Marie Railway Company, the subsidy to which shall be paid as follows: on the completion of that portion of the said road from, at or near Newboro' to Westport, a distance of four miles, the sum of twelve thousand eight hundred dollars, and on the completion of the remaining sixteen miles from Westport towards Palmer's Rapids, the sum of fifty-one thousand two hundred dollars.

"Within one month after the commencement of each session of Parliament, whilst any of the said moneys are being paid out, there shall be laid before Parliament a statement showing all payments of such moneys during the then next preceding year, the names of the respective persons to whom such payments have been made, and the amounts paid them respectively, together with the engineer's report upon which payments have been recommended, and copies of all contracts between the Government and the company under which the said subsidies are authorized to be paid.

"The granting of such subsidies respectively shall be subject to such conditions for securing such running power or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

By the Act 55-56 Victoria, chap. 5, 1892 *(Assented to 9th July, 1892)*:—

241. To the Lake Erie and Detroit River Railway Company, for fifty-eight miles of their railway from a point at or near Cedar Creek to the town of Ridgetown, in lieu of the subsidies granted to the Lake Erie and Detroit River Railway Company by the Act 53 Victoria, chapter 2, and to the Amherstburg, Lake Shore and Blenheim Railway Company by the Act 52 Victoria, ch. 3.	$224,000 00
242. To the Ottawa, Arnprior and Parry Sound Railway Company, for fifty-five miles of their railway from Barry's Bay towards the Northern Pacific Junction Railway, a subsidy not exceeding $6,400 per mile on the first twenty-seven and a half miles out from Barry's Bay, and not exceeding $3,200 per mile on the second twenty-seven and a half miles, nor exceeding in the whole.	264,000 00
243. To the Canadian Pacific Railway Company or to the Columbia and Kootenay Railway and Navigation Company, for a railway from a point on the Canadian Pacific Railway at or near Revelstoke to the head of Arrow Lake, for twenty-five miles of such railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	80,000 00
244. To the Tobique Valley Railway Company, for a railway from the north end of the eleven miles for which a subsidy was granted by the Act 53 Victoria, chapter 2, to Plaister Rock Island, for 3 miles of such railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	9,600 00
245. To the Montfort Colonization Railway Company, for twenty-one miles of their railway from Lachute, St. Jérôme or a point at or near St. Sauveur, on the line of the Montreal and Western Railway, to Montfort and westward, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	67,200 00
246. To the Ontario, Belmont and Northern Railway Company, for ten miles of their railway from the Belmont iron mines to the Canadian Pacific Railway and the Central Ontario Railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	32,000 00
247. To the Montreal and Champlain Junction Railway Company, the balance remaining unpaid of the subsidies granted by the Acts 50-51 Victoria, chapter 24, and 51 Victoria, chapter 3, a subsidy of.	15,100 00
248. To the Buctouche and Moncton Railway Company, for thirty-two miles of their railway from Moncton to Buctouche, the balance remaining unpaid of the subsidy, not exceeding $3,200 per mile, granted by the Acts 49 Victoria, chapter 10, and 50-51 Victoria, chapter 24, not exceeding in the whole.	35,480 00
249. To the Cobourg, Northumberland and Pacific Railway Company, for nineteen miles of their railway from Cobourg to the Ontario and Quebec Railway (in addition to the subsidy granted by the Act 53 Victoria, chapter 2), a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	60,800 00

250. For a railway from the parish of St. Rémi, in the county of Napierville, to St. Cyprien in the said county, for twelve miles of such railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..................................	$ 38,400 00
251. To the Inverness and Richmond Railway Company (or any other company undertaking the work), for twenty-five miles of their railway from a point on the Cape Breton Railway, at or near Orangedale, to Broadcove, a subsidy not exceeding $3,200 per mile, in lieu of the subsidy of $50,000 granted to the said railway company by 53 Victoria, chapter 2, and on the same conditions, not exceeding in the whole........................	80,000 00
252. To the Nicola Valley Railway Company, for twenty-five miles of their railway from a point on the Canadian Pacific Railway at or near Spence's Bridge towards Nicola Lake	80,000 00
253. To the Lotbinière and Megantic Railway Company, for fifteen miles of their railway from a point at or near St. Jean Deschaillons towards Glen Lloyd, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole...........................	48,000 00
254. To the Stewiacke and Lansdowne Railway Company, for a railway from a point on the Intercolonial Railway, through the Stewiacke Valley, on a line which will afford facilities of communication with the iron mines at Springside, Upper Stewiacke and Musquodoboit settlements, twenty-five miles, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..........	80,000 00
255. To the Philipsburg Junction Railway and Quarry Company, for six and seven-hundredths miles of their railway from Stanbridge Station to Philipsburg, in the county of Missisquoi, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	21,600 00
256. To the Kingston, Napanee and Western Railway Company, for three miles of their railway from a point at or near Harrowsmith to a point at or near Sydenham, in lieu of the subsidy granted for this section of road by the Act 52 Victoria, chapter 3, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	9,600 00
257. For a railway from Cape Tourmente towards Murray Bay, in the province of Quebec, twenty miles, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	64,000 00
258. To the Stewiacke and Lansdowne Railway Company, for a railway from Truro, or a point between Truro and Stewiacke, to Newport or to Windsor, in the province of Nova Scotia, for forty-nine miles of such railway, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole...........................	156,800 00
259. To the Restigouche and Victoria Railway Company, for fifteen miles of their railway from Campbellton towards Grand Falls, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	48,000 00
260. For a railway from St. Johns to Ste. Rosalie, thirty-two miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole...	102,400 00
261. For a railway from St. Placide to St. Andrew's, eight miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	25,600 00
262. For a railway to complete the connection between Sydney and Louisburg, in the county of Cape Breton, for twenty-eight miles of such railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.................................	89,600 00

263. To the Belleville and Lake Nipissing Railway Company, for thirty miles of their railway from Belleville to Tweed and thence to Bridgewater, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........ .... $ 96,000 00

264. To the Kingston, Smith's Falls and Ottawa Railway Company, for fifty-six miles of their railway from the city of Kingston to Smith's Falls, in lieu of the subsidies, not to exceed $179,200, granted by the Acts 52 Victoria, chapter 3, and 53 Victoria, chapter 2, a subsidy calculated on a basis of three and a half per cent on the amount of such subsidies so granted, to be paid in semi-annual instalments for such period not exceeding twenty-one years, as the company may elect, which represents a grant in cash of.. 179,200 00

"Provided, that upon the completion of twenty-eight miles of the said railway a semi-annual subsidy may be paid proportionate to the value of the portion so completed in comparison with that of the whole fifty-six miles : Provided also, that the company may deposit with the Minister of Finance and Receiver General, a sum not exceeding $1,170,000, in consideration whereof there shall be paid to the company for such period not exceeding twenty years as the company may elect, a semi-annual annuity calculated on a basis of three and a half per cent on the amount so deposited. Provided further, that the Governor in Council may permit the company to assign the said subsidy and annuity to trustees by way of security for any bonds or securities which may be issued by the company in respect of their undertaking."

265. To the St. Catharines and Niagara Central Railway Company, for thirty-four miles of their railway from the city of St. Catharines to the city of Hamilton, in lieu of the subsidies, not to exceed $108,000, granted by the Acts 52 Victoria, chapter 3, and 53 Victoria, chapter 2, a subsidy calculated on a basis of three and a half per cent on the amount of the said subsidies, to be paid in semi-annual instalments for such period, not exceeding twenty years, as the company may elect, representing a grant in cash of $108,000 : Provided that, upon the completion of ten miles of said railway, a semi-annual subsidy may be paid proportionate to the value of the portion so completed in comparison with that of the whole thirty-four miles. Provided also, that the company may deposit with the Minister of Finance and Receiver General a sum not exceeding $400,000, in consideration whereof there shall be paid by the Government to the company, for such period not exceeding twenty years, as the company may elect, a semi-annual annuity, calculated on a basis of three and a half per cent on the amount so deposited, or a guarantee of a like sum, as interest on the bonds of the company : Provided further, that the company, with the approval of the Governor in Council, may assign the said subsidy and annuity to trustees by way of security for principal, or interest of any bonds or securities which may be issued by the company in respect of their undertaking, and the subsidy last above mentioned to the St. Catharines and Niagara Central Railway Company shall be paid in instalments, the first semi-annual payment upon which shall be made at the end of the six months from the date of the Chief Engineer's certificate of the completion of the first ten miles of railway, and each subsequent payment at the end of six months thereafter, for the term of twenty years or less. It is a condition of this subsidy that the sum not exceeding $400,000 above mentioned shall be deposited with the Finance Minister before January 1st, 1893.

266. To the Woodstock and Centreville Railway Company, for a railway from Woodstock towards Centreville, twenty miles, in lieu of the subsidy granted by 50-51 Victoria, chapter 24, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..... $64,000 00

267. To the Brockville, Westport and Sault Ste. Marie Railway Company, for the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding $3,200 per mile, and also for the balance remaining unpaid of the subsidy granted by the Act 53 Victoria, chapter 2, nor exceeding in the whole... 96,800 00

268. To the New Glasgow Iron, Coal and Railway Company, for a railway from Eureka Junction on the Intercolonial Railway to a point at or near Sunnybrae, including a branch line to the charcoal iron furnace at Bridgeville, for twelve and a half miles of such railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................................... 40,000 00

269. To the Thousand Island Railway Company, for an extension of their railway to connect with the Brockville, Westport and Sault Ste. Marie Railway, the Kingston, Napanee and Western Railway, the Kingston, Smith's Falls and Ottawa Railway, or the waters of the Rideau Canal, and an extension across the mouth of the Gananoque River, the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding in the whole................................... 44,000 00

Payable, $14,000 on the completion of the last named or southern extension, and the balance of said subsidy, being $30,000, on the completion of the first named or northern extension of their railway.

270. To the Manitoulin and North Shore Railway Company, for thirty miles of their railway from Little Current to the Algoma Branch of the Canadian Pacific Railway, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................. $96,000 00

271. To the Lindsay, Bobcaygeon and Pontypool Railway Company, for sixteen miles of their railway from the end of the line subsidized by the Act 53 Victoria, chapter 2, at the junction with the Midland Railway, to Pontypool, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole...................... 51,200 00

272. For seventy-five miles of the railway from Sand Point, Shelburne Harbour, in Nova Scotia, to Annapolis Royal, in the county of Annapolis and to a junction at or near New Germany on the Nova Scotia Central Railway, with a view to future construction to Liverpool, in lieu of the subsidy of a like amount granted by the Act 53 Victoria, chapter 2, for the same length of railway from Shelburne and from Liverpool, towards Annapolis, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole... 240,000 00

273. To the Kingston, Napanee and Western Railway Company, for twenty miles of their railway, being extensions or branches in the counties of Peterborough, Hastings, Addington, Frontenac or Leeds, towards iron deposits, a subsidy not exceeding $3,200 per mile, payable in instalments regulated by the length of each of the said extensions, additions or branches, the subsidy not exceeding in the whole..... .... 64,000 00

274. To the St. John Valley and Rivière du Loup Railway Company, for ten miles of their railway from the north end of the line subsidized by the Act 53 Victoria, chapter 2, towards the town of Woodstock, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................................... 48,000 00

275.	To the Cobourg, Northumberland and Pacific Railway Company, for thirty miles of their railway from Cobourg to the Ontario and Quebec Railway, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	$ 96,000 00
276.	To the Ottawa, Arnprior and Parry Sound Railway Company, for thirty miles of their railway, from Eganville to Barry's Bay, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	96,000 00
277.	To the Ottawa, Arnprior and Parry Sound Railway Company, for twenty-two miles of their railway from a point on the Canadian Pacific Railway to Eganville, in lieu of the subsidy granted by the Act 51 Victoria, chapter 3, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	70,400 00
278.	To the Lake Témiscamingue Colonization Railway Company, for thirty-five miles of their railway from Mattawa to the Long Sault, in lieu of the subsidies granted by the Acts 52 Victoria, chapter 3, and 53 Victoria, chapter 2, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	112,000 00
279.	To the Témiscouata Railway Company, for twelve miles of their railway from the north end of the section of the St. François Branch subsidized by the Act 51 Victoria, chapter 3, being the first twelve miles on the section subsidized by the Act 53 Victoria, chapter 2, a subsidy not exceeding $1,800 per mile, in addition to the subsidy already granted, and not exceeding in the whole	21,600 00
280.	To the Tilsonburg, Lake Erie and Pacific Railway Company, for sixteen miles of their railway from Port Burwell to Tilsonburg, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	51,200 00
281.	To the Woodstock and Centreville Railway Company, for six miles of their railway from the west end of their twenty miles subsidized by the Act 50-51 Victoria, chapter 24, to the international boundary between the province of New Brunswick and the state of Maine, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	19,200 00
282.	To the Lake Témiscamingue Colonization Railway Company, for 15 miles of their railway from the Long Sault to the crossing of the Kippewa River, a subsidy not exceeding $3,200 per mile—and a subsidy of fifteen per cent on the value of a wooden truss bridge over the Ottawa River near Mattawa, not exceeding $15,000,—nor exceeding in the whole	63,000 00
283.	To the Goderich and Wingham Railway Company, for thirty-one miles of their railway from Goderich to Wingham, via Port Albert, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	99,200 00
284.	To the Joliette and St. Jean de Matha Railway Company, for eight miles of their railway from St. Félix de Valois to St. Jean de Matha, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	25,600 00
285.	To the Bracebridge and Baysville Railway Company, for fifteen miles of their railway from Bracebridge towards Baysville, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	48,000 00
286.	To the Nipissing and James Bay Railway Company, for twenty-five miles of their railway from, at or near North Bay station on	

	the Canadian Pacific Railway towards James Bay, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........	$ 80,000 00
287.	For a railway from a point on the Intercolonial Railway between Ste. Flavie and Little Métis station to Matane, for fifty miles of such railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole....................................	160,000 00
288.	To the Ontario and Pacific Railway Company, for fifty-three and eighty-seven hundredths miles of their railway from Cornwall to Ottawa, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole....................................	172,400 00
289.	For a railway from a point on the line of the Canadian Pacific Railway on the Isle Jésus, in the county of Laval, towards St. Eustache, for twelve miles of such railway, in lieu of the subsidy granted by the Act 50-51 Victoria, chapter 24, to the Carillon and Grenville Railway Company, for twelve miles of their railway, from St. Eustache to Sault au Récollet, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........	38,400 00
290.	For a railway from St. Eustache to St. Placide, in the county of Two Mountains, for eighteen miles of such railway, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.....	57,600 00
291.	To the Port Arthur, Duluth and Western Railway Company, the balance remaining unpaid of the subsidy granted by the Act 51 Victoria, chapter 3, not exceeding, with the amount already paid, $3,200 per mile, nor exceeding in the whole............	114,125 00
292.	To the Drummond County Railway Company for four and six-tenths miles of their railway from Bull's Wharf, on the St. Lawrence River, near Nicolet, to Ste. Rosalie Junction, an excess of distance by the constructed line over the subsidies heretofore voted for a railway between the said points, $3,200 per mile, not exceeding in the whole......................	14,720 00
293.	To the St. Lawrence and Adirondack Railway Company, for five and forty-two hundredths miles of their railway, from Huntingdon towards the international boundary, which, with the distance between Valleyfield and Huntingdon, twelve and fifty-eight hundredths miles, makes up the distance of eighteen miles named in the 53 Vic., chap. 2, granting a subsidy to this company, and for five and forty-hundredths miles from the east end of the eighteen miles referred to to the international boundary, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	25,024 00

“The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications, and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, which agreement the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies respectively shall be payable out of the Consolidated

Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized,—except as to subsidies with respect to which it is hereinbefore otherwise provided, and except also as to the subsidy granted to the Kingston, Smith's Falls and Ottawa Railway Company, and the subsidy granted to the St. Catharines and Niagara Central Railway Company, the first semi-annual payments upon both of which shall be made at the end of six months from the date of the Chief Engineer's certificate of the completion of their railways respectively, and each subsequent payment at the end of each six months thereafter, for the term of twenty years or less.

"The granting of such subsidies respectively shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines."

294. Notwithstanding the expiration of the time limited by the Act 47 Victoria, chapter 8, and by the contract entered into with the Pontiac Pacific Junction Railway Company, the Governor in council may pay the balance remaining unpaid of the subsidy granted by the said Act to the said company, according as it becomes due and payable in accordance with the said contract, and subject to the terms and conditions applicable to the said subsidy under the terms of the said Act.

295. Notwithstanding the expiration of the time limited by the Act 52 Victoria, chapter 3, and by the contract entered into with the Quebec and Lake St. John Railway Company, the Governor in Council may pay the balance remaining unpaid of the subsidy granted by the said Act to the said company, according as it becomes due and payable in accordance with the said contract, and subject to the terms and conditions applicable to the said subsidy under the terms of the said Act; and notwithstanding anything contained in the Act 50-51 Victoria, chapter 24, the Governor in Council may also pay to the said company the balance remaining unpaid of the subsidy granted to the company by the said Act, amounting to $12,800, on the four miles of their road from the north end of the main line subsidized towards Roberval.

By the Act 56 Vic., chap. 2, 1893 (*Assented to 1st April, 1893*):—

296. To the Great Eastern Railway Company, for twenty miles of their railway, from the east end of the line subsidized by the Act 50-51 Victoria, chapter 24, at St. Grégoire, towards the Chaudière Junction station on the Intercolonial Railway, in the province of Quebec, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole .... $ 64,000 00

297. To the United Counties Railway Company, for thirty-two miles of their railway, from a point at or near the town of Iberville to St. Hyacinthe, and thence towards Sorel, in lieu of the subsidy granted by the Act 55-56 Victoria, chapter 5, for a railway from St. Johns to Ste. Rosalie, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole 102,400 00

298. To the Ontario, Belmont and Northern Railway Company, for ten miles of their railway, divided into two sections: first, from the Belmont Iron Mines to Marmora village; second, from Marmora village to the junction with the Ontario Central Railway, in lieu of the subsidy granted by the Act 55-56 Victoria, chapter 5, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole 32,000 00

299. To the Central Ontario Railway Company, for twenty miles of their railway, from Coe Hill or Gilmore, or some point between

Coe Hill and Gilmore, to Bancroft, via L'Amable, or as near thereto as practicable, in lieu of the subsidy granted by the Act 48-49 Victoria, chapter 59, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.......................... $ 64,000 00

300. To the Quebec and Lake St. John Railway Company, for thirty miles of their railway, from Lake St. John towards Chicoutimi, the balance remaining unpaid of the subsidy granted by the Act 51 Victoria, chapter 3, not exceeding in the whole........ 81,040 00

301. To the Irondale, Bancroft and Ottawa Railway Company, for fifty miles of their railway, from the Victoria branch of the Midland Railway to the village of Bancroft, in the county of Hastings, the balance remaining unpaid of the subsidy granted by the Act 47 Victoria, chapter 8, and again granted by the Act 52 Victoria, chapter 3, not exceeding in the whole..................... 145,000 00

302. To the Beauharnois Junction Railway Company, for thirty miles of their railway, from Ste. Martine towards St. Anicet, the balance remaining unpaid of the subsidy granted by the Act 50-51 Victoria, chapter 24, not exceeding in the whole........ 3,500 00

303. To the St. Stephen and Milltown Railway Company, for three and a half miles of their railway, from the town of St. Stephen to the town of Milltown, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.............................. 11,200 00

304. To the Quebec, Montmorency and Charlevoix Railway Company, for thirty miles of their railway, from the east bank of the River St. Charles, to or near to Cape Tourmente, in the province of Quebec, the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding in the whole.. 30,400 00

305. To the Ottawa and Gatineau Valley Railway Company, for sixty-two miles of their railway, from Hull station towards Le Désert, the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding in the whole........... 89,248 00

306. To the Grand Trunk, Georgian Bay and Lake Erie Railway Company, for fifteen miles of their railway, from the village of Tara, or some point between Tara and Hepworth, to the town of Owen Sound, in the province of Ontario, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.............. 48,000 00

307. To the Nova Scotia Central Railway Company (or to such person or persons or company as in the opinion of the Minister or acting Minister of Justice are entitled to the same) for eighty miles of their railway, from Lunenburg, on the east coast of Nova Scotia, westward to a point in the district of New Germany, together with a spur about three-fourths mile long to Bridgewater railway wharf, and from a point thirty-three and a half miles from Lunenburg and running to Middleton on the Windsor and Annapolis Railway, of unpaid subsidies granted by the Acts 50-51 Victoria, chapter 24, and 51 Victoria, chapter 3, an amount not exceeding in the whole................... 4,500 00

308. To the Great Northern Railway Company, for eighteen miles of their railway, from a point at or near New Glasgow or St. Lin, to or near to Montcalm, in the province of Quebec, the balance remaining unpaid of the subsidy granted by the Act 54-55 Victoria, chapter 8, not exceeding in the whole.............. 25,600 00

309. To the Great Northern Railway Company, for fifteen miles of their railway, from, at or near Montcalm to the Canadian Pacific

Railway between Joliette and St. Félix de Valois, in lieu of the subsidy granted by the Act 53 Victoria, chap. 2, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole......... $ 48,000 00

310. To the Montfort Colonization Railway Company, for twenty-one miles of their three-feet gauge railway from Lachute, St. Jérôme, or a point at or near St. Sauveur, on the line of the Montreal and Western Railway, to Montfort and westward, in lieu of the subsidy granted by the Act 55-56 Victoria, chapter 5, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..... 67,200 00

311. To the Maskinongé and Nipissing Railway Company, for fifteen miles of their railway, from a point on the Canadian Pacific Railway at or near Maskinongé or Louiseville, towards the parish of St. Michel des Saints, on the river Mattawa, in the province of Quebec, and for fifteen miles of their railway from the north end of the fifteen miles above referred to, towards the parish of St. Michel des Saints on the river Mattawa, in the province of Quebec, in lieu of the subsidies granted by the Acts 52 Victoria, chap. 3, and 53 Victoria, chap. 2, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........ 96,000 00

312. To the Parry Sound Colonization Railway Company, for forty miles of their railway, from the village of Parry Sound to the village of Sundridge, or some other point on the Northern Pacific Junction Railway, in the province of Ontario, the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding in the whole...................... 97,600 00

313. To the Jacques Cartier Union Railway Company, for extending and completing their railway, in lieu of the subsidy granted by the Act 50-51 Victoria, chapter 24, a subsidy of............. 20,000 00

314 To the Oshawa Railway Company, for seven miles of their railway and branches as follows: from Port Oshawa to a point at or near Edmondson's Falls mill site, near Mill Street, in the town of Oshawa (this portion being known as the "Lake" section of the said railway); thence to a point at or near the town hall in the town of Oshawa, and thence to the Oshawa station of the Grand Trunk Railway Company of Canada (this portion being known as the "Town" or "Northern" section of the said railway)—in lieu of the subsidy granted by the Act 54-55 Victoria, chapter 8, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.. 22,400 00

"All the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, which agreement the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council.

"The granting of such subsidies respectively shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

"All the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized,—except as follows :—

"(*a.*) The subsidy to the Ontario, Belmont and Ottawa Railway Company, which shall be paid as follows: on the completion of the first section, an instalment proportionate to the value of the said section in comparison with that of the ten miles hereby subsidized, to be established as aforesaid, and the balance of the said subsidy on the completion of the second section;

"(*b.*) The subsidy to the Oshawa Railway Company, which shall be paid as follows: on the completion of the "Town" or "Northern" section, an instalment proportionate to the value of the said section in comparison with that of the seven miles hereby subsidized, to be established as aforesaid, and the balance of the said subsidy, on the completion of the "Lake" section of the said railway."

By the Act 57-58 Vic., cap. 4, 1894. *(Assented to, 23rd July, 1894)* :—

315.	To the Bracebridge and Baysville Railway Company, for fifteen miles of their railway from Bracebridge towards Baysville, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........	$ 48,000
316.	To the Brockville, Westport and Sault Ste. Marie Railway, the balance remaining unpaid of the subsidy granted by chapter 3 of 1889, not exceeding $3,200 per mile, and also the balance remaining unpaid of the subsidy granted by chapter 2 of 1890, which was re-granted by chapter 5 of 1892; the whole not exceeding	86,800
317.	To the Tilsonburg, Lake Erie and Pacific Railway Company, for sixteen miles of their railway, from Port Burwell to Tilsonburg, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	51,200
318.	To the Brantford, Waterloo and Lake Erie Railway Company, for eighteen miles of their railway, from the town of Brantford to the village of Hagarsville or the village of Waterford, or some intermediate point on the Canada Southern Railway, the balance remaining unpaid of the subsidy granted by chapter 24 of 1887, not exceeding $3,200 per mile, nor exceeding in the whole	4,790
319.	To the St. Catharines and Niagara Central Railway Company, for 34 miles of their railway from the city of St. Catharines to the city of Hamilton, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	108,800
320.	To the Montreal and Ottawa Railway Company (formerly the Vaudreuil and Prescott Railway Company), for thirty miles of their railway from Vaudreuil towards Hawkesbury, the balance remaining unpaid of the subsidy granted by chapter 24 of 1887; and for 30 miles of their railway from the western end of the 30 miles first mentioned towards Ottawa, the balance remaining unpaid of the subsidy granted by chapter 2 of 1890, not exceeding $3,200 per mile; the whole not exceeding........	118,400
321	Notwithstanding the expiration of the time limited by chapter 2 of 1890, and by the contract entered into with the Quebec Central Railway Company, and notwithstanding anything otherwise in the said chapter 2 contained, the Governor in Council may pay the subsidy granted by the said chapter to the said company at the present worth of the twenty annual payments mentioned in the said chapter (interest computed at four per cent), for and upon the completion of its railway extending from a point between the Chaudière River and Tring Station to a point on the International Railway at or near Lake Megantic, and upon the inspection and acceptance of the same by the Chief Engineer of Railways and Canals, the sum in all of....................	288,000

822.	To the Philipsburg Junction Railway and Quarry Company, for $\frac{67}{100}$ mile of their railway from Stanbridge Station to Philipsburg, in the county of Missisquoi and a branch to Missisquoi Bay, the balance remaining unpaid of the subsidy granted by chapter 5 of 1892, not exceeding $3,200 per mile, nor exceeding in the whole..	$ 2,912
823.	To the Joliette and St. Jean de Matha Railway Company, for 8 miles of their railway from St. Félix de Valois to St. Jean de Matha, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	25,600
824.	To the Lake Temiscamingue Colonization Railway Company, for their railway from Mattawa to the foot of the Kippewa Lake, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole $160,000,—also 15 per cent on the value of a wooden truss bridge over the Ottawa River near Mattawa, not to exceed $15,000 in all, in lieu of the subsidies granted by chapter 5 of 1892,—also the balance remaining unpaid of the subsidy granted by chapter 24 of 1887, for their railway from Long Sault to Lake Kippewa, a subsidy not exceeding $3,200 per mile of railway and 15 per cent on the value of the bridges,—also, a sum of $1,750 additional per mile on their said railway from Mattawa to the foot of the Kippewa Lake; the whole not exceeding..	274,940
825.	For a railway from St. Placide to St. Andrews, 8 miles, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	25,600
826.	For a railway from St. Eustache to St. Placide, in the county of Two Mountains, for 18 miles of such railway, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..................	57,600
827.	For a railway from a point on the line of the Canadian Pacific Railway on Isle Jésus, in the county of Laval, towards St. Eustache, for 12 miles of such railway, in lieu of the subsidy granted by chapter 5 of 1892, to the Carillon and Grenville Railway Company, for 12 miles of their railway, from St. Eustache to Sault au Récollet, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..................................	38,400
828.	For a railway from the parish of St. Rémi, in the county of Napierville, to St. Cyprien, in the said county, for 12 miles of such railway, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	38,400
829.	To the Pontiac Pacific Junction Railway Company, for bridging the several channels of the Ottawa River at Culbute and west thereof, a subsidy of $31,500, to be paid out monthly as the work progresses, upon the certificate of the chief engineer of government railways, in the proportion which the value of the work executed bears to the value of the whole work undertaken; and for 3 miles of their railway extending from a point 3 miles east of Pembroke to Pembroke, in the province of Ontario, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole $9,600, in lieu of the subsidy granted by chapter 3 of 1888; provided that the entire work subsidized upon this railway shall be completed within 4 years from the passing of this Act; the subsidy granted by this Act not to exceed in the whole.......	41,100

330. To the Pontiac Pacific Junction Railway Company, for the construction or acquisition of 7½ miles of railway, from Hull to Aylmer, in lieu of the subsidy granted by chapter 2 of 1890, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	$ 24,000
331. To the Pontiac Pacific Junction Railway Company, for 85 miles of their railway from Aylmer to Pembroke, the balance remaining unpaid of the subsidy granted by chapter 8 of 1884, less the subsidy granted for the line from Hull to Aylmer, provided the Ottawa River is crossed at some point not east of Lapasse, a subsidy not exceding $3,200 per mile, nor exceeding in the whole	73,172
332. To the Harvey Branch Railway Company, for 3 miles of their railway from the southern terminus of the Albert Railway to Harvey Bank, the balance remaining unpaid of the subsidy granted by chapter 24 of 1887, not exceeding $3,200 per mile, nor exceeding in the whole...........................	4,046
333. For a railway from a point on the Intercolonial Railway near Newcastle via Douglastown, to a point on the River Miramichi opposite the town of Chatham, in the province of New Brunswick, 6 miles, in lieu of the subsidy granted by chapter 10 of 1886, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	19,200
334. For a railway from some point on the Joggins Railway, near the Hebert River, to Young's Mills, in the province of Nova Scotia, a distance of 5 miles, in lieu of the subsidy granted by chapter 3 of 1889, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	16,000
335. To the Woodstock and Centreville Railway Company, for a railway from Woodstock to the international boundary between the province of New Brunswick and the state of Maine, 26 miles, in lieu of the subsidies granted by chapter 24 of 1887 and chapter 2 of 1890 a subsidy not exceeding $3,200 per mile nor exceeding in the whole................................	83,200
336. For 90 miles of the railway from Newport or Windsor to Truro, or to a point between Truro and Stewiacke, and from a point on the said railway to a point at or near Eastville, and from Eastville through the valley of the Musquodoboit River towards a point on the proposed Dartmouth branch of the Intercolonial, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding $3,200 per mile; and also for a railway bridge over the Shubenacadie River on the line of the said railway, a subsidy of 15 per cent on the value of the structure; the whole not exceeding..	300,000
337. To the Nipissing and James Bay Railway Company, for 25 miles of their railway from, at or near North Bay Station on the Canadian Pacific Railway towards James Bay, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding $3,200 per mile; also for 43 miles of their railway from North Bay towards Lake Tamagaming, a subsidy not exceeding $3,200 per mile; the whole not exceeding........................	217,000
338. To the Lotbinière and Mégantic Railway Company, for 15 miles of their railway, in addition to the 15 miles already subsidized and built, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole......................................	48,000
339. To the Drummond County Railway Company, for 30 miles of their railway from St. Leonard northerly towards a junction with the Intercolonial Railway at Chaudière Junction, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........	96,000

340.	For a railway from Lime Ridge, in the county of Wolfe, in the province of Quebec, northerly through the county of Wolfe and into the county of Megantic, a distance not exceeding 50 miles from Lime Ridge, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	$ 160,000
341.	To the Strathroy and Western Counties Railway Company, for 25 miles of their railway from St. Thomas through the counties of Elgin and Middlesex, towards Forest Station or Park Hill, on the Grand Trunk Railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	80,000
342.	To the Parry Sound Colonization Railway Company, for 20 miles of their railway east from Parry Sound, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	64,000
343.	To the Manitoulin and North Shore Railway Company, for 10 miles of their railway from Little Current to Nelson, on the Algoma Branch of the Canadian Pacific Railway, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	32,000
344.	To the United Counties Railway Company for 32 miles of their railway from Iberville to Sorel, in addition to the 32 miles already subsidized, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	102,400
345.	To the Joliette and St. Jean de Matha Railway Company, for 12 miles of their railway from St. Jean de Matha to Ste. Emelie de L'Energie, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	38,400
346.	To the Great Northern Railway Company, for 22 miles of their railway, from the eastern end of the 15 miles subsidized by chapter 2 of 1893 to a point between Joliette and St. Félix de Valois, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	70,400
347.	To the Quebec and Lake St. John Railway Company, for 2 miles of the Chicoutimi branch of their railway, from the east end of the 50 miles already subsidized and built eastward to deep water at Chicoutimi, a subsidy not exceeding $3,200 per mile; also for 12 miles from the 52nd mile on the Chicoutimi branch to Ha Ha Bay, a subsidy not exceeding $3,200 per mile; the whole not exceeding	44,800
348.	To the Pontiac and Ottawa Railway Company, for 23 miles of their railway from the point of divergence from the Pontiac Railway to Ferguson's Point, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	73,600
349.	To the Ottawa and Gatineau Valley Railway Company, for 20 miles of their railway from the eastern end of the 62 miles already subsidized towards Désert, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	64,000
350.	To the Canada Eastern Railway Company for 6 miles of their railway from the town of Chatham to Black Brook, a subsidy not exceeding $3,200 per mile; also for 4 miles of their railway for a branch to the village of Nelson, a subsidy not exceeding $3,200 per mile; the whole not exceeding	32,000
351.	For a railway from Cross Creek Station, on the Canada Eastern Railway to Stanley village, in the county of York, in the province of New Brunswick, 6 miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	19,200
352.	To the Restigouche and Victoria Railway Company, for 20 miles of their railway from the western end of the 15 miles subsidized by chapter 5 of 1892, towards Grand Falls, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole	64,000

853.	To the Central Railway Company of New Brunswick, for 15 miles of their railway from Chipman station to the Newcastle coal fields, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	$	48,000
854.	To the Tobique Valley Railway Company, for 15 miles of their railway from the present terminus at Plaister Rock easterly, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..		48,000
855.	Towards the restoration or renewal of the railway bridge on the South-eastern Railway over the Yamaska River at Yamaska, a subsidy equal to one-third of the actual cost of the renewal of the bridge, but the grant not to exceed in the whole........		50,000
856.	To the Boston and Nova Scotia Coal and Railway Company, for 10½ miles of their railway from the north end of the section already subsidized to Broad Cove, a subsidy not exceeding $3,200 per mile; also for 25 miles of their railway from a point on the Cape Breton Railway at or near Orangedale towards Broad Cove, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding $3,200 per mile; the whole not exceeding		113,600
857.	For a railway from Port Hawkesbury towards Cheticamp, 25 miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..		80,000
858.	To the Manitoba North-western Railway Company, for 100 miles of the extension of their main line from its present western terminus towards Prince Albert,—the company relinquishing 3,200 acres of the land grant per mile, and the whole road to be operated as a continuous line of railway under one management, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..		320,000
859.	For a line of railway from the junction of the Elk and Kootenay Rivers to Coal Creek, a distance of 34 miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..........		108,800
860.	For a railway from Abbotsford Station on the Mission Branch of the Canadian Pacific Railway to the town of Chilliwack, 21 miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..		67,200
861.	To the Nicola Valley Railway Company, for 28 miles of their railway from the western end of the section of their road subsidized by chapter 5, of 1892, towards Nicola Lake, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........		89,600
862.	To the Nakusp and Slocan Railway Company, for 38 miles of their railway from the town of Nakusp to a point at or near the Forks of Carpenter Creek, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole................................		121,600
863.	To the Pontiac and Kingston Railway Company, for 22 miles of a railway from Portage du Fort to Upper Thorne Centre, via Shawville, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole....................................		70,400
864.	To the New Glasgow Iron, Coal and Railway Company, for 5 miles of their railway, from Sunnybrae to Kerrogare, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole....		16,000 00
865.	To the South Shore Railway Company, for 35 miles of their railway from Yarmouth towards Shelburne and Lockport, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.		112,000 00
866.	To the Cape Breton Railway Extension Company, for 30 miles of railway from Port Hawkesbury to St. Peter's, on their line of railway from Port Hawkesbury to Louisbourg, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........		96,000 00

867.	For a railway from a point on the Intercolonial Railway between Norton and Sussex Stations towards Havelock, 20 miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.	$ 64,000 00
868.	For a railway from St. John to Barneville, for a distance of 10 miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	32,000 00
869.	For a line of railway from Cap de la Magdeleine to connect with the Piles Branch of the Canadian Pacific Railway, 3 miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	9,600 00
870.	To the Canada Eastern Railway Company, for an extension of one mile from the western end of their railway, to connect with the Canadian Pacific Railway, a subsidy not exceeding..........	3,200 00
871.	To the Great Northern Railway Company, for 30 miles of their railway from its junction with the Lower Laurentian Railway near St. Tite, in the vicinity of the River St. Maurice, westward, in lieu of the subsidy granted to the Maskinongé and Nipissing Railway Company by chapter 2 of 1893, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole........	96,000 00
872.	To the Lindsay, Bobcaygeon and Pontypool Railway Company, for 16 miles of their railway from Bobcaygeon to the Midland Railway, and for another 16 miles from the end of the first mentioned 16 miles to Pontypool, in lieu of the subsidies granted by chapter 2 of 1890, and chapter 5 of 1892, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..............	102,400 00
873.	To the Montfort Colonization Railway Company, for 12 miles of their railway from the end of the 21 miles already subsidized westward to a point on the Rouge River, in the county of Argenteuil, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole..	38,400 00
874.	For a railway from a point on the Caraquet Railway, at or near Pokemouche siding, towards Tracadie village, 12 miles, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole.....	38,400 00

The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railway and Canals, and specified in an agreement to be made in each case by the company with the Government, which agreement the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council.

The granting of such subsidies respectively shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

The said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized,—except as to subsidies with respect to which it is hereinbefore otherwise provided, and except also as to the subsidy granted to the Great Northern Railway Company by chapter two of 1893, for fifteen miles from Montcalm to the Canadian Pacific Railway, which shall be paid as follows: on the completion of the eighteen miles from New Glasgow to Montcalm and of two miles out of the fifteen miles from Montcalm to the Canadian Pacific Railway, an instalment proportionate to the value of the ten miles out of the total mileage subsidized by chapter two of 1893, to be established as aforesaid, and the balance of the said subsidy on the completion of the remaining thirteen miles of the said railway.

No subsidies were authorized by 58-59 Vict. (1895), nor by 59 Vict. (1896).

By the Act 60-61, chapter 4, 1897 *(Assented to 29th June, 1897)*.

1. In this Act, unless the context otherwise requires, the expression "cost" means the actual, necessary and reasonable cost, and includes the amount expended upon any bridge up to and not exceeding twenty-five thousand dollars, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway, nor the cost of terminals and right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals and upon the report of the Chief Engineer of Government Railways, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

2. The Governor in Council may grant a subsidy of $3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated), which shall not cost more on the average than $15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than $15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of $3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of $15,000 per mile, such subsidy not exceeding in the whole the sum of $6,400 per mile:—

375. To the Ottawa and New York Railway Company, for 53$\frac{87}{100}$ miles of their railway from Cornwall to Ottawa, in lieu of the subsidy granted by chapter 5 of the statutes of 1892,

376. To the Kingston, Smith's Falls and Ottawa Railway Company, for 101 miles of their railway from Kingston, or a junction with the Grand Trunk Railway at Rideau or some other point near Kingston, to Ottawa, in lieu of the subsidy granted by chapter 5 of 1892;

377. For a railway from a point on the Canadian Pacific Railway, at or near either Welsford or Westfield, or between the said two points, to Gagetown, in the county of Queen's, New Brunswick, not exceeding 30 miles, in lieu of the subsidy granted by chapter 2 of 1890;

378. To the Cobourg, Northumberland and Pacific Railway Company, for 50 miles of their railway from Cobourg to the Ontario and Quebec Railway, in lieu of the subsidies granted by chapter 5 of 1892;

379. To the Ottawa and Gatineau Railway Company, for 20 miles of their railway from the end of the 62nd mile subsidized towards Désert, in lieu of the subsidies granted by chapter 4 of 1894;

380. To the Great Northern Railway Company, for 9 miles of their railway, being shortage in distance between Montcalm and St. Tite;

381. To the St. Gabriel de Brandon and Ste. Emélie de l'Energie Railway Company, for 15 miles of their railway from St. Gabriel to Ste. Emélie de l'Energie, and 5 miles from a point on the main line to St. Jean de Matha, making in all 20 miles, in lieu of the subsidy granted by chapter 4 of 1894;

382. To the Central Railway Company of New Brunswick, for 15 miles of their railway from Chipman Station to Newcastle Coal Fields, county of Queen's, in lieu of the subsidy granted by chapter 4 of 1894;

383. To the Gulf Shore Railway Company, for $5\frac{1}{2}$ miles of their railway from the end of the section subsidized to Tracadie and thence to Big Tracadie, New Brunswick;

384. For a railway from Campbellton, on the Intercolonial Railway, towards Grand Falls, New Brunswick, a distance of 20 miles, commencing at Campbellton, in lieu of the subsidy granted by chapter 4 of 1894;

385. To the Pontiac Pacific Junction Railway Company, for $7\frac{1}{2}$ miles of their railway from Hull to Aylmer, in lieu of the subsidy granted by chapter 2 of 1890;

386. To the Schomberg and Aurora Railway Company, for 15 miles of their railway from a point on the Grand Trunk Railway between King and Newmarket to Schomberg, in the province of Ontario;

387. To the Tilsonburg, Lake Erie and Pacific Railway Company, for $3\frac{8}{10}$ miles of their railway from the present terminus, through Tilsonburg to the Michigan Central Railway, in the province of Ontario.

388. To the Ottawa, Arnprior and Parry Sound Railway Company, for 52 miles of their railway, from the crossing of the Northern Pacific Junction Railway to 55 miles west of Barry's Bay, and also for 4 miles of their railway across Parry Island;

389. To the Pembroke Southern Railway Company, for 20 miles of their railway from Pembroke to Golden Lake, in the province of Ontario;

390. To the Ontario and Rainy River Railway Company, for 80 miles of their railway from the Port Arthur, Duluth and Western Railway to Rainy Lake, in the province of Ontario;

391. To the Strathroy and Western Counties Railway Company, for 7 miles of their railway, commencing at a point at or near Caradoc Station on the Canadian Pacific Railway and extending to the town of Strathroy;

392. To the Phillipsburg Railway and Quarry Company, for $\frac{66}{100}$ mile of their railway from the end of the subsidized section to the government wharf at Phillipsburg;

393. To the United Counties Railway Company, for 1 mile of their railway from Johnson to St. Grégoire Station, in the province of Quebec;

394. To the St. Lawrence and Adirondack Railway Company, for $13\frac{1}{2}$ miles of their railway from Beauharnois to Caughnawaga, in the province of Quebec;

395. To the East Richelieu Valley Railway Company, for 24 miles of their railway from Iberville to St. Thomas, boundary of Missisquoi County, in the province of Quebec;

396. To the Portage du Fort and Bristol Branch Railway Company, for 15 miles of their railway to a point at or near Shawville, in the county of Pontiac;

397. For a railway from a point at or near Windsor Junction, on the Intercolonial Railway, to Upper Musquodoboit, for a distance of 40 miles;

398. To the St. Stephens and Milltown Railway Company, for $1\frac{14}{100}$ mile of their railway from Milltown to St. Stephen, in the province of New Brunswick;

399. For a railway from Sunny Brae to Country Harbour, and from a point at or near Country Harbour Cross Roads to Guysboro', in the province of Nova Scotia, a distance of 65 miles;

400. For a railway from Port Hawkesbury, Nova Scotia, to Port Hood and Broad Cove, 53 miles, in lieu of the subsidy granted by chapter 4 of 1894;

401. For a railway from a point on the Central Railway in the county of Lunenburg, Nova Scotia, to the town of Liverpool, via the village of Caledonia, or to the village of Caledonia via Liverpool, or for any part thereof, the whole distance not exceeding 62 miles;

402. For a railway from Indian Garden on the line of the Central Railway, to Shelburne, in the province of Nova Scotia, a distance of 35 miles;

403. To the Coast Railway Company of Nova Scotia, for 61 miles of their railway from Yarmouth to Port Clyde, in the province of Nova Scotia;

404. For a railway from Brookfield Station on the Intercolonial Railway to Eastville, 30 miles;

405. To the Great Northern Railway Company, for 35 miles of their railway from St. Jérôme, in the province of Quebec, to Hawkesbury, in the province of Ontario;

406. To the Drummond County Railway Company, for 42½ miles of their railway from Moose Park to Chaudière River, provided that the amount of the said subsidy shall be refunded to the Government of Canada in the event of the company's railway from Ste. Rosalie to Chaudière River being purchased or leased for a term of years by the government.

3. The Governor in Council may grant the subsidies hereinafter mentioned to the railway companies and towards the construction of the railways also hereinafter mentioned, that is to say:—

407. To the Great Northern Railway Company, for 67 miles of their railway between Montcalm and its junction with the Lower Laurentian Railway near St. Tite, in the vicinity of the St. Maurice River, the balance remaining unpaid of the subsidies granted by chapter 2 of 1893, and by chapter 4 of 1894, between these points, a subsidy not exceeding $3,200 per mile, nor exceeding in the whole....................................$ 182,400 00

408. To the Pontiac Pacific Junction Railway Company, for 85 miles of their railway from Aylmer to Pembroke, also for bridging the Ottawa River, the balance remaining unpaid of the subsidy granted by chapter 8 of 1884, and by chapter 4 of 1894, not exceeding.. 114,272 00

409. To the Ottawa and Gatineau Railway Company, for 62 miles of their railway from Hull towards Désert, in the province of Quebec, the balance remaining unpaid of the subsidy granted by chapter 2 of 1893, not exceeding in the whole................ 35,872 00

410. To the Grand Trunk Railway Company of Canada, for a subsidy towards the rebuilding and enlargement of the Victoria Bridge at Montreal over the St. Lawrence River, 15 per cent upon the amount expended thereon, not exceeding.................... 300,000 00

411. To the Montfort Colonization Railway Company, for 33 miles of their railway from Montfort Junction to Arundel, in the province of Quebec, a subsidy not exceeding $2,000 per mile, nor exceeding in the whole.................................... 66,000 00

412. To the Irondale, Bancroft and Ottawa Railway Company, the balance remaining unpaid of the subsidy for the last five miles of the company's railway; the eastern terminus to be either at the village of Bancroft or at some point near the Hastings Road, in the township of Herschell, in lieu of the subsidy granted by chapter 2 of 1893, not exceeding in the whole........................ 16,000 00

413. To the Great Northern Railway Company, towards the construction of a railway bridge over the Ottawa River at Hawkesbury, 15 per cent upon the amount expended thereon, not exceeding.. 52,500 00

414. For a railway and traffic bridge over the Ottawa River at Nepean Point, between the city of Ottawa and the city of Hull, 15 per cent upon the amount expended thereon, not exceeding........ 112,500 00

4. The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as are approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, which agreement the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council.

5. The granting of such subsidies respectively shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

6. The said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized—except as to subsidies with respect of which it is hereinbefore otherwise provided.

7. Any company receiving a subsidy as aforesaid, in excess of $3,200 per mile, shall be bound to carry Her Majesty's mails for a term of ten years free of charge over the portion of railway subsidized.

By the Special Act 60-61 Victoria, Chapter 5, 1897. *(Assented to 29th June, 1897.)*

1. Subject to the conditions hereinafter mentioned, the Governor in Council may grant to the Canadian Pacific Railway Company a subsidy towards the construction of a railway from Lethbridge, in the district of Alberta, through the Crow's Nest Pass to Nelson, in the province of British Columbia (which railway is hereinafter called "the Crow's Nest Line,") to the extent of eleven thousand dollars per mile thereof, and not exceeding in the whole the sum of three million six hundred and thirty thousand dollars, payable by instalments on the completion of each of the several sections of the said railway of the length respectively of not less than ten miles, and the remainder on the completion of the whole of the said railway; provided that an agreement between the Government and the company is first entered into in such form as the Governor in Council thinks fit, containing covenants to the following effect, that is to say:—

On the part of the company:

(*a.*) That the company will construct or cause to be constructed, the said railway upon such route and according to such descriptions and specifications and within such time or times as are provided for in the said agreement, and, when completed, will operate the said railway for ever;

(*b.*) That the said line of railway shall be constructed through the town of Macleod, and a station shall be established therein, unless the Governor in Council is satisfied by the company that there is good cause for constructing the railway outside the limits of the said town, in which case the said line of railway shall be located and a station established at a distance not greater than five hundred yards from the limits of the said town;

(*c.*) That so soon as the said railway is opened for traffic to Kootenay Lake, the local rates and tolls on the railway and on any other railway used in connection therewith and now or hereafter owned or leased by or operated on account of the company south of the company's main line in British Columbia, as well as the rates and tolls between any point on any such line or lines of railway and any point on the main line of the company throughout Canada, or any other railway owned or leased by or operated on account of the company, including its lines of steamers in British Columbia, shall be first approved by the Governor in Council or by a railway commission, if and when such commission is established by law, and shall at all times thereafter and from time to time be subject to revision and control in the manner aforesaid;

(*d.*) That a reduction shall be made in the general rates and tolls of the company as now charged, or as contained in its present freight tariff, whichever rates are now the lowest, for carloads or otherwise, upon the classes of merchandise hereinafter mentioned, westbound, from and including Fort William and all points east of Fort

William on the company's railway to all points west of Fort William on the company's main line, or on any line of railway throughout Canada owned or leased by or operated on account of the company, whether the shipment is by all rail line or by lake and rail, such reduction to be to the extent of the following percentages respectively, namely :—

Upon all green and fresh fruits, 33⅓ per cent;

Coal oil, 20 per cent;

Cordage and binder twine, 10 per cent;

Agricultural implements of all kinds, set up or in parts, 10 per cent;

Iron, including bar, band, Canada plates, galvanized, sheet, pipe, pipe-fittings, nails, spikes and horse shoes, 10 per cent;

All kinds of wire, 10 per cent;

Window glass, 10 per cent;

Paper for building and roofing purposes, 10 per cent;

Roofing felt, box and packing, 10 per cent;

Paints of all kinds and oils, 10 per cent;

Live stock, 10 per cent;

Wooden ware, 10 per cent;

Household furniture, 10 per cent;

And that no higher rates than such reduced rates or tolls shall be hereafter charged by the company upon any such merchandise carried by the company between the points aforesaid; such reductions to take effect on or before the first of January, one thousand eight hundred and ninety-eight;

(*e.*) That there shall be a reduction in the company's present rates and tolls on grain and flour from all points on its main line, branches or connections, west of Fort William to Fort William and Port Arthur and all points east, of three cents per one hundred pounds, to take effect in the following manner :—One and one-half cent per one hundred pounds on or before the first day of September, one thousand eight hundred and ninety-eight, and an additional one and one-half cent per one hundred pounds on or before the first day of September, one thousand eight hundred and ninety-nine; and that no higher rates than such reduced rates or tolls shall be charged after the dates mentioned on such merchandise from the points aforesaid;

(*f.*) That the Railway Committee of the Privy Council may grant running powers over the said line of railway and all its branches and connections, or any portions thereof, and all lines of railway now or hereafter owned or leased by or operated on account of the company in British Columbia south of the company's main line of railway, and the necessary use of its tracks, stations and station grounds, to any other railway company applying for such grant upon such terms as such committee may fix and determine, and according to the provisions of The Railway Act and of such other general Acts relating to railways as are from time to time passed by Parliament; but nothing herein shall be held to imply that such running powers might not be so granted without the special provision herein contained;

(*g.*) That the said railway, when constructed, together with that portion of the company's railway from Dunmore to Lethbridge, and all lines of railway, branches, connections and extensions in British Columbia south of the main line of the company in British Columbia shall be subject to the provisions of The Railway Act and of such other general Acts relating to railways as are from time to time passed by Parliament;

(*h.*) That if the company or any other company with whom it shall have any arrangement on the subject shall, by constructing the said railway or any part of it, as stipulated for in the said agreement, become entitled to and shall get any land as a subsidy from the Government of British Columbia, then such lands, excepting therefrom those which in the opinion of the Director of the Geological Survey of Canada (expressed in writing) are coal-bearing lands, shall be disposed of by the company or by such other company to the public according to regulations and at prices not exceeding these prescribed from time to time by the Governor in Council, having regard to the then existing provincial regulations applicable thereto; the expression "lands" including all mineral and timber thereon which shall be disposed of as aforesaid, either with or without the land, as the Governor in Council may direct:

(*i*.) That if the company or any other company with whom it shall have any arrangement on the subject shall, by constructing the said railway or any part of it as stipulated for in the said agreement, become entitled to and shall get any lands as a subsidy from the Government of British Columbia which in the opinion of the Director of the Geological Survey of Canada (expressed in writing) are coal-bearing lands, then the company will cause to be conveyed to the Crown, in the interest of Canada, a portion thereof to the extent of fifty thousand acres, the same to be of equal value per acre as coal lands with the residue of such lands. The said fifty thousand acres to be selected by the Government in such fair and equitable manner as may be determined by the Governor in Council, and to be thereafter held or disposed of or otherwise dealt with by the Government as it may think fit on such conditions, if any, as may be prescribed by the Governor in Council, for the purpose of securing a sufficient and suitable supply of coal to the public at reasonable prices, not exceeding two dollars per ton of two thousand pounds free on board cars at the mines.

And on the part of the Government, to pay the said subsidy by instalments as aforesaid.

2. The company shall be bound to carry out in all respects the said agreement, and may do whatever is necessary for that purpose.

3. In order to facilitate such financial arrangements as will enable the company to complete the railway as aforesaid without delay and to acquire and consolidate with it the railway from Dunmore to Lethbridge, hereinafter called "the Alberta Branch," which, under the authority of chapter thirty-eight of the statutes of 1893, it now operates as lessee, and is under covenant to purchase, the company may issue bonds which will be a first lien and charge and be secured exclusively upon the said Alberta Branch and Crow's Nest Line together in the same way and with the same effect as if both the said pieces of railway to be so consolidated were being built by the company as one branch of its railway within the meaning of section one of chapter fifty-one of the statutes of 1888, and that section shall apply accordingly, such first lien to be subject to the payment of the purchase money of the Alberta Branch, as provided for in the said covenant to purchase.

By the Act 62–63 Vic., chapter 7 (*Assented to 11th August, 1899*).

1. In this Act, unless the context otherwise requires, the expression "cost" means the actual, necessary and reasonable cost and shall include the amount expended upon any bridge, up to and not exceeding $25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway, nor the cost of terminals and right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of Government Railways, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

2. The Governor in Council may grant a subsidy of $3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than $15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than $15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of $3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of $15,000 per mile, such subsidy not exceeding in the whole the sum of $6,400 per mile:—

415. To the Central Ontario Railway Company, for an extension of their railway from, or from near, either Coe Hill or Rathbun Station on the company's railway to, or near to Bancroft, not exceeding 21 miles, in lieu of the subsidy granted by chapter 5 of 1892;

416. To the Great Northern Railway Company, for a railway between Montcalm and St. Tite Junction, on the Lower Laurentian Railway, Quebec, not exceeding 53½ miles; and for a branch from their main line to Shawenegan Falls, Quebec, not exceeding 6½ miles.

417. To the Phillipsburg Railway and Quarry Company, shortage in the extension of their railway from a point on the company's line at or near the end of the subsidized section, to the government wharf at Phillipsburg, Quebec, not exceeding $\frac{66}{100}$ of a mile;

418. To the Strathroy and Western Counties Railway Company, for a line from Strathroy, Ontario, via Adelaide and Arkona, to either Forest, Tedford, or Park Hill, not exceeding 24 miles, in lieu of the subsidy granted by chapter 4 of 1894;

419. To the St. John Valley and Rivière du Loup Railway Company, for a line of railway from Fredericton, in the county of York, New Brunswick, to Woodstock, in the county of Carleton, not exceeding 59 miles;

420. For a railway from Port Hawkesbury, on the Strait of Canso, Nova Scotia, to St. Peter's, not exceeding thirty miles;

421. For a railway from Windsor, Nova Scotia, to Truro, via the township of Clifton, not exceeding 58 miles, in lieu of the subsidy granted by chapter 4 of 1894;

422. For a railway from a point at or near Brookfield Station, Nova Scotia, on the Intercolonial Railway, to Eastville, not exceeding 25 miles, in lieu of the subsidy granted by chapter 4 of 1897;

423. For a railway from Cross Creek Station, on the Canada Eastern Railway, to Stanley Village, New Brunswick, not exceeding 6 miles;

424. For a railway from the village of St. Rémi to Stottville or some point on the Delaware and Hudson Railway (Grand Trunk) in the parish of St. Paul de l'Ile aux Noix, not exceeding 19 miles;

425. For a railway between Pontypool and Bobcaygeon, via Lindsay, Ontario, not exceeding 40 miles.

426. To the Pontiac Pacific Junction Railway Company, for a railway from Aylmer to Hull, Quebec, not exceeding 9 miles, in lieu of the subsidy granted by chapter 4 of 1897;

427. To the Portage du Fort and Bristol Branch Railway Company, for a branch line from a point on the Pontiac Pacific Junction Railway at or near the village of Quyon, towards the village of Portage du Fort, Quebec, not exceeding 15 miles, in lieu of the subsidy granted by chapter 4 of 1897;

428. To the Orford Mountain Railway Company, for a branch from their railway from a point between Lawrenceville and Eastman to Waterloo, not exceeding 13 miles;

429. To the Atlantic and Lake Superior Railway Company, for an extension of their railway from Caplin to Paspebiac, Quebec, not exceeding 30 miles;

430. To the United Counties Railway Company, for a railway from St. Robert Junction to Sorel, 6½ miles, (this sudsidy to be payable only in the event of adequate running rights over the South-eastern Railway between the two points above mentioned not being granted to the first mentioned Company on terms to be approved by the Railway Committee of the Privy Council,) and from Mount Johnson to St. Grégoire Station, 1 mile, not exceeding 7½ miles.

431. For a railway from a point on the Central Railway in the county of Lunenburg, Nova Scotia, to the town of Liverpool, via the village of Caledonia, or to the village of Caledonia, via Liverpool, or for any part thereof, the whole distance not exceeding 62 miles;

432. For a railway from Indian Gardens, Queen's County, Nova Scotia, to Shelburne, in the said province, a distance of 35 miles;

433. The subsidy which the Ontario and Rainy River Railway Company is entitled to receive under chapter 4 of 1897, shall be $6,400 per mile for the 80 miles mentioned in the said Act; not exceeding in all $512,000.

434. To the Bay of Quinté Railway Company, for such extensions, branches or additions to their system as will enable the said Company to connect their lines of railway or connecting lines with iron or other mines or mineral or wood lands in the counties of Peterborough, Northumberland, Hastings, Lennox and Addington, Frontenac or Leeds, payable in instalments regulated by the length of each of the said extensions or branches or additions, as the case may be, in lieu of part of the balance remaining unpaid of the subsidy granted to the Kingston, Napanee and Western Railway Company, by chapter 5 of 1892, but not exceeding $3,200 per mile for 10 miles, nor exceeding in the whole $32,000;

435. To the Quebec and Lake St. John Railway Company, for 12 miles of their railway from the end of their line at deep water on the Chicoutimi branch of their railway, to Ha Ha Bay, in the lieu of the subsidy for the 12 miles granted by chapter 4 of 1894;

436. For a line of railway from Hawkesbury, Ontario, to South Indian, not exceeding 35 miles;

437. For a railway from Sault Ste. Marie, Ontario, towards Michipicoten River and harbour and towards the main line of the Canadian Pacific Railway, not exceeding 40 miles;

438. For a branch line of railway from the main line of the Ottawa, Arnprior and Parry Sound Railway to the town of Parry Sound, Ontario, not exceeding 5 miles;

439. For a railway from the village of Haliburton, via the village of Whitney, towards the town of Mattawa, Ontario, not exceeding 20 miles;

440. For an extension of the Tilsonburg, Lake Erie and Pacific Railway, from Tilsonburg to Ingersoll or Woodstock, Ontario, not exceeding 28 miles;

441. To the South Shore Railway Company, from Sorel Junction along the South Shore to Lotbinière, Quebec, a distance not exceeding 82 miles;

442. To the Massawippi Valley Railway Company for an extension of their railway to the village of Stanstead Plain, Quebec, not exceeding 2½ miles;

443. For a railway from Port Hawkesbury on the Strait of Canso, to Caribou Cove, Nova Scotia, a distance of 10 miles;

444. For a railway from Fort Frances, Ontario, westerly to a point at or near the mouth of Rainy River, a distance not exceeding 70 miles;

445. To the Central Railway Company of New Brunswick, for an extension of their line of railway from Newcastle Coal Fields to Gibson, New Brunswick, not exceeding 30 miles;

446. To the Canadian Northern Railway Company, for a railway from a point on the present line of the Winnipeg Great Northern Railway north of Swan River to Prince Albert, North-west Territories, not exceeding 100 miles;

447. For a railway from some point near Antler Station to a point near Moose Mountain, Manitoba, not exceeding 50 miles;

448. For a railway from Sunnybrae to Country Harbour, and from a point at or near Country Harbour Cross Roads to Guysborough, Nova Scotia, to make up the deficiency in mileage between points mentioned and subsidized by chapter 4 of 1897, additional mileage not exceeding 15 miles;

449. For a railway from Port Clyde towards Lockeport, in the province of Nova Scotia, not exceeding 20 miles;

450. For a railway from a point on the Intercolonial Railway at or near Halifax towards the Central Railway in the county of Lunenburg, not exceeding 20 miles;

451. For a railway from Labelle, in the province of Quebec, in a north-westerly direction, to Nominingue, via Notre Dame de l'Annonciation, a distance not exceeding 22 miles;

452. For a railway from Owen Sound, in the province of Ontario, to Meaford, not exceeding 21 miles;

453. To the Ottawa and Gatineau Railway Company, for their line of railway in and through the city of Hull, Quebec, not exceeding 4 miles;

454. To the Western Alberta Railway Company, from a point on the United States boundary, west of Range 27, north-westerly towards Anthracite, in the district of Alberta, not exceeding 50 miles ;

455. To the Edmonton, Yukon and Pacific Railway Company, for a railway from the town of South Edmonton, North-west Territories, to North Edmonton, and thence westerly towards the Yellow Head Pass, a distance not exceeding 50 miles ;

456. To the Restigouche and Western Railway Company, in addition to the 20 miles subsidized by chapter 4 of 1897, and in continuation from the westerly end of the said 20 miles towards the St. John River, a further distance not exceeding 15 miles, and for the company's railway from a point on the St. John River, New Brunswick, at or near Grand Falls, or St. Leonard, or between Grand Falls and St. Leonard, and extending easterly towards Campbellton, such point to be approved by the Governor in Council, a distance of 12 miles; in all not exceeding 27 miles ;

457. For a railway in extension of the St. Francis branch of the Temiscouata Railway to the mouth of the St. Francis River, a distance not exceeding 3 miles ;

458. To the Canada Eastern Railway Company, for a line of railway from Nelson, New Brunswick, to connect with the company's main line running into Chatham, to complete the connection from Nelson to such main line, not exceeding in the whole 2¼ miles ;

459 To the Bay of Quinté Railway Company, for an extension of their line in a westerly direction from a point at or near Richmond boundary road near Deseronto for a distance not exceeding 2 miles ; also for an extension of their line from its present terminus at Tweed in a northerly direction for a distance of 2 miles, and for an extension of their line from the end of the last 2 miles mentioned in a northerly direction for a distance not exceeding 3 miles—in all 7 miles ; subsidies payable on each of the sections mentioned as each of such sections is completed ;

460. To the Ontario, Belmont and Northern Railway Company, for an extension of their railway from its present terminus at Iron Mines in a north-westerly direction, a distance not exceeding 5 miles ; and also for an extension of the company's railway southerly, from the present southern terminus thereof to the Central Ontario Junction of the Canadian Pacific Railway, a distance not exceeding 2 miles ; but the last mentioned aid for the said 2 miles of railway shall not be granted in case the Railway Committee of the Privy Council finds that adequate running powers on fair terms can be secured to the company over that portion of the line of the Central Ontario Railway between the present southerly end of the Ontario, Belmont and Northern Railway and the Canadian Pacific Railway Company's line at Central Ontario Junction ; subsidies payable on each of the sections mentioned as each of such sections is completed ;

461. For a line of railway from a point on the Pembroke Southern Railway at or near Golden Lake, Ontario, towards a point on the Irondale, Bancroft and Ottawa Railway at or near Bancroft, not exceeding 20 miles ;

462. For a line of railway from Paspebiac, Quebec, to Gaspé in the said province, a distance not exceeding 82 miles ;

463. To the Lake Erie and Detroit River Railway Company, for a line of railway from Ridgetown, Ontario, to St. Thomas, in the said province, a distance not exceeding 44 miles ; this subsidy to be payable only in the event of adequate running rights over the Canada Southern Railway between the two points above mentioned not being granted to the first mentioned company on terms to be approved by the Railway Committee of the Privy Council ;

464. To the Kingston and Pembroke Railway Company, for the construction of branches from the Company's main line to the iron mine at Bluff Point and to the Martele mine in the county of Renfrew, not exceeding 5 miles ;

465. For a railway from the town of Parry Sound extending northerly towards Sudbury, a distance not exceeding 20 miles.

3. The Governor in Council may grant the subsidies hereinafter mentioned towards the construction of the railways also hereinafter mentioned, that is to say:—

466.	The Ontario and Rainy River Railway Company, for a railway from a point 80 miles west of Stanley Station, on the Port Arthur, Duluth and Western Railway, to Fort Frances, for a distance of 140 miles, at $6,400 per mile, not exceeding in the whole	$ 896,000 00
467.	To the Quebec Bridge Company, towards the construction of a railway bridge over the St. Lawrence River, at Chaudière Basin, near Quebec, one million dollars, 40 per cent of which amount may be paid on monthly progress estimates, approved by the Government engineers, of materials delivered and work done	1,000,000 00
468.	To the South Shore Railway Company, towards the restoration and renewal of the railway bridge over the Yamaska River at Yamaska, Quebec	50,000 00
469.	Towards the construction of a bridge over the Richelieu River at Sorel, 15 per cent upon the amount expended thereon, not exceeding	35,000 00
470.	Towards the construction of a bridge across the St. Francis River, 15 per cent of the amount expended thereon, not exceeding	50,000 00
471.	Towards the construction of a bridge across the Nicolet River, 15 per cent upon the amount expended thereon, not exceeding	15,000 00
472.	To the Midland Railway Company, Limited, towards the construction of a bridge across the Shubenacadie River, 15 per cent upon the amount expended thereon, not exceeding	33,750 00
473.	To the Great Northern Railway Company, towards the construction of a bridge across the St. Maurice River, 15 per cent upon the amount expended thereon, not exceeding	16,425 00
474.	Also towards the construction of a bridge across the Rivière du Loup, 15 per cent upon the amount expended thereon, not exceeding	15,000 00
475.	Also towards the construction of a steel bridge and viaduct at the Maskinongé River, 15 per cent upon the amount expended thereon, not exceeding	15,000 00

4. The subsidies granted to the Ontario and Rainy River Railway Company, the Canadian Northern Railway Company and the Edmonton, Yukon and Pacific Railway Company are granted upon the condition, and, if received and paid under the authority of this Act to the above mentioned companies respectively, shall be received upon the condition, that the said companies shall not, nor shall any of them, at any time amalgamate with, or lease its line or lines to, any railway company other than those mentioned in this section, except as may be authorized by Parliament; nor shall any of the said railways be leased to or operated by any other company; nor shall any of the said companies make an agreement for a common fund or for pooling its receipts with any other railway company; and any such lease, amalgamation or agreement shall be absolutely void, excepting in so far as such agreement may extend to traffic or running arrangements which have been approved by the Governor in Council.

5. The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as are approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, which agreement the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council.

6. The granting of such subsidies, and the receipt thereof by the respective companies, shall be subject to the condition that the Governor in Council may at all times provide and secure to other companies such running powers, traffic arrangements and other rights as will afford to all railways connecting with those so subsidized reasonable and proper facilities in exercising such running powers, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the Governor in Council shall have absolute control at all times over the rates and tolls to be levied and imposed by any of the companies or upon any of the railways hereby subsidized.

7. The said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized—except as to subsidies with respect to which it is hereinbefore otherwise provided.

8. Every company receiving a subsidy under this Act, its successors or assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation for men, supplies, material and mails over the portion of its line in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars, properly equipped, for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the department of the Government for which such service is being performed and the company performing it, and in case of disagreement, then at such rates as are approved by the Governor in Council; and in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of subsidy received by the company under this Act.

9. As respects all railways for which subsidies are granted by this Act, the company at any time owning or operating any of the said railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers showing the cost of constructing the railway, the cost of operating it, and the earnings thereof.

By the Act 63–64 Vic., chapter 8 (*Assented to July 18, 1900*).

1. In this Act, unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost and shall include the amonnt expended upon any bridge, up to and not exceeding $25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway nor the cost of terminals and right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of Government Railways, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

2. The Governor in Council may grant a subsidy of $3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than $15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than $15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of $3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of $15,000 per mile, such subsidy not exceeding in the whole the sum of $6,400 per mile:—

476. For a railway from a point at or near the junction of the Irondale, Bancroft and Ottawa Railway and the Grand Trunk Railway to the village of Minden, in the county of Haliburton, Ontario, not exceeding 12 miles.

477. To the Strathroy and Western Counties Railway Company, for a railway commencing at a point at or near Caradoc station, on the Canadian Pacific Railway, and extending to the town of Strathroy, Ontario, not exceeding 7 miles.

478. For a line of railway from a point on the Pembroke Southern Railway at or near Golden Lake, towards a point on the Irondale, Bancroft and Ottawa Railway at or near Bancroft, Ontario, for the further extension of such railway westerly from the western terminus of the 20 miles subsidized by chapter 4 of 1897, for a distance not exceeding 20 miles.

479. To the Algoma Central Railway Company for 25 miles of its line of railway from its terminus at Michipicoten Harbour, Lake Superior, towards the main line of the Canadian Pacific Railway, and for a further extension of this company's line of railway from Sault Ste. Marie towards Michipicoten River and Harbour, Ontario, towards the main line of the Canadian Pacific Railway, 25 miles in all, not exceeding 50 miles.

480. To the Central Ontario Railway Company, for a further extension of their railway from, at or near Bancroft to a point on the Canada Atlantic Railway between Whitney and Barry's Bay, Ontario, not exceeding 20 miles.

481. To the Manitoulin and North Shore Railway Company, for a line of railway between Little Current, on Manitoulin Island, and Sudbury, Ontario, on the Canadian Pacific Railway, the company undertaking to bridge between Little Current and the main land, the bridge to be so constructed and maintained as to afford suitable facilities, in the opinion of the Minister of Railways and Canals, for free vehicular and passenger traffic, the same as upon a public highway, the work to be begun and prosecuted from Little Current and Sudbury, one-half of the subsidy to be applicable, as earned, in respect of the work beginning at Little Current and carried on towards Sudbury, and one-half thereof to be applicable, as earned, in respect of the work beginning at Sudbury and carried on towards Little Current, the course of the line of railway to cross the Sault Ste. Marie branch of the Canadian Pacific Railway, not exceeding 66 miles.

482. For a railway from Bracebridge, in Muskoka, to a point at or near Baysville, Ontario, not exceeding 15 miles.

483. For a railway beginning at a point northerly 20 miles from Parry Sound, and extending from that point to the French River, Ontario, not exceeding 35 miles.

484. For a railway from a point 20 miles north-easterly from the village of Haliburton, via the village of Whitney, towards the village of Mattawa, Ontario, not exceeding 40 miles.

485. To the Kingston and Pembroke Railway Company, for a branch line of railway to iron mines in Bedford township, Ontario, not exceeding 12 miles.

486. To the Thousand Islands Railway Company for an extension of their railway from the present northerly terminus to a point easterly thereof, not exceeding 2 miles;

And also for an extension from a point on the railway to connect their railway with the Brockville, Westport and Sault Ste. Marie Railway, the Bay of Quinté Railway, the Kingston, Smith's Falls and Ottawa Railway, or the waters of the Rideau Canal, the balance remaining of the subsidy granted by chapter 5 of 1892, not exceeding 9½ miles.

487. For a railway from Dyment, on the Canadian Pacific Railway, to the New Klondike mining district, Ontario, not exceeding 7 miles.

488. To the Schomberg and Aurora Railway Company, for an extension of their line from its easterly terminus to a point at or near Bond's Lake, Ontario, not exceeding 4 miles.

489. To the Nipissing and James Bay Railway Company, for a railway from, at or near North Bay station, on the Canadian Pacific Railway, towards James Bay, or Lake Tamagaming, Ontario, not exceeding 20 miles.

490. In aid of the Ottawa and New York Railway Company's bridge over the St. Lawrence River, and for the Canadian portion of such bridge, a sum not exceeding $90,000.

491. To the Grand Trunk Railway Company of Canada, towards the cost of the rebuilding and enlargement of the Victoria Bridge over the St. Lawrence River, Quebec, in addition to the amount received by the company on account of the subsidy granted by chapter 4 of 1897, viz: $270,000, to make up the grant in aid of the undertaking to $500,000, upon condition that the tolls upon the bridge for passenger and vehicular traffic shall be subject to the approval of the Governor in Council, a sum not exceeding $230,000.

492. For a railway and traffic bridge over the Ottawa River at Nepean Point, between the city of Ottawa, Ontario, and the city of Hull, Quebec, upon condition that the bridge be so constructed as to provide suitable facilities, to the satisfaction of the Minister of Railways and Canals, for free vehicular and foot passenger traffic, the same as upon a public highway, in addition to the $112,500 already granted,—and, notwithstanding anything in the said Act, the subsidy hereby granted, together with the grant of $112,500 under chapter 4 of 1897, shall be paid upon the completion of the bridge and its approaches, upon the Chief Engineer's report of such completion, and the recommendation of the Minister,—a sum not exceeding $100,000.

493. To the Canadian Northern Railway Company, in further extension of their railway north of Swan River towards Prince Albert, North-west Territories, in addition to the grant by chapter 7 of 1899, a further mileage not exceeding 100 miles.

494. For a railway from the westerly end of the Waskada branch of the Canadian Pacific Railway, Manitoba, further westward, not exceeding 20 miles.

495. For a railway from a point on the Alberta Railway and Coal Company's Railway towards Cardston, Alberta, N.W.T., for 30 miles of railway at $2,500 per mile.

496. To the Kaslo and Lardo-Duncan Railway Company, for a railway from Duncan Lake towards Lardo or Arrow Lake, British Columbia, or from Lardo to Arrow Lake, not exceeding 30 miles.

497. To the Restigouche and Western Railway Company, for the company's railway, in addition to the 15 miles subsidized by chapter 7 of 1899, on the easterly section of the line, and in continuation from the westerly end of the said 15 miles, a further distance of 15 miles towards the St. John River; and for the said railway, in addition to the 12 miles subsidized by the said chapter on the westerly section of the said line, a further distance from the easterly end thereof of 15 miles, towards Campbellton, N.B., not exceeding 30 miles.

498. For a line of railway from St. Charles Junction on the Intercolonial Railway towards the St. Francis branch of the Temiscouata Railway, Quebec, not exceeding 45 miles, and from the mouth of the St. Francis River, N.B., westerly towards St. Charles Junction, 15 miles, in all not exceeding 60 miles.

499. For a line of railway from Bristol, in the county of Carleton, New Brunswick, on the Canadian Pacific Railway, easterly, a distance not exceeding 17 miles.

500. For a line of railway from Shediac, county of Westmorland, New Brunswick, to Shemogue, and towards Cape Tormentine, in the said county, a distance not exceeding 38 miles.

501. For a railway from Lockeport, Nova Scotia, to Sable River, or other convenient point of railway connection, not exceeding 20 miles.

502. To the Inverness and Richmond Railway Company, for a railway in extension of the company's line northward from Broad Cove to Cheticamp, C.B., Nova Scotia, not exceeding 40 miles.

503. For a railway from Bridgetown to Victoria Beach, Nova Scotia, not exceeding 30 miles.

504. For a railway from a point on the Intercolonial Railway, Pictou branch, to Kempt Town, county of Colchester, Nova Scotia, not exceeding 4½ miles.

505. For a railway from Brazil Lake, on the Dominion Atlantic Railway, to Kemptville, Nova Scotia, not exceeding 11 miles.

506. To the Montfort and Gatineau Colonization Railway Company, to enable it to extend its railway trom Arundel to a point in the municipality of the united townships of Preston and Hartwell, province of Quebec, not exceeding 30 miles.

507. To the Chateauguay and Northern Railway Company, for a railway from a point in Hochelaga ward, Montreal, to a point on the Great Northern Railway, in or near the town of Joliette, passing near the town of L'Assomption, Quebec, together with a spur into the said town, not exceeding 42 miles.

508. To the Chateauguay and Northern Railway Company, for a single-track standard railway bridge, with two roadways 10 feet wide, for free vehicular and foot passenger traffic, the same as upon a public highway, from Bout L'Isle to Charlemange, at the junction of the Ottawa and St. Lawrence rivers, $150,000.

509. To the Chateauguay and Northern Railway Company, towards the construction of a bridge across the Lac Ouareau River, $15,000.

510. To the Arthabaska Railway Company, for a railway from Victoriaville to West Chester, province of Quebec, a distance not exceeding 12 miles.

511. To the Great Northern Railway Company, for a branch line from the town or from near the town of Joliette towards Ste. Emélie, touching the parishes of Ste. Beatrix and Ste. Jean de Matha, not exceeding 20 miles.

512. For a railway from Farnham, province of Quebec, to Frelighsburg and the International Boundary Line, not exceeding 21 miles.

513. Towards the construction of a railway bridge over the St. Francis River, in lieu of the grant under chapter 7 of 1899, at St. François du Lac, on the condition that the bridge, with approaches, be built so as to allow the municipalities to make use thereof, to establish and maintain a suitable roadway for the free passage of foot passengers, vehicles and animals, to be approved by the Minister of Railways and Canals, $50,000.

514. Towards the construction of a railway bridge over the Nicolet River at Nicolet, in lieu of the grant under chapter 7 of 1899, $15,000.

515. For a line of railway from Halifax towards a point on the Central Railway of Nova Scotia, in the county of Lunenburg, in addition to and in extension of the 20 miles subsidized by chapter 7 of 1899, not exceeding 20 miles.

3. The subsidies hereby granted and any subsidies heretofore granted under any Act of the Parliament of Canada, still in force, but not fully paid, towards the construction of any railway or bridge, shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless in this Act otherwise expressly provided, at the option of the Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows:

(*a*) upon the completion of the work subsidized; or

(*b*.) by instalments on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken; or (*c.*) upon progress estimates on the certificate of the Chief Engineer of Railways and Canals, that in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than sixty thousand dollars; or

(*d.*) with respect to (*b*) and (*c*), part one way, part the other.

4. The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as are approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the government, which agreement the government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council.

5. The granting of such subsidies, and the receipt thereof by the respective companies, shall be subject to the condition that the Governor in Council may at all times provide and secure to other companies such running powers, traffic arrangements and other rights as will afford to all railways connecting with those so subsidized reasonable and proper facilities in exercising such running powers, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the Governor in Council shall have absolute control at all times over the rates and tolls to be levied and imposed by any of the companies or upon any of the railways hereby subsidized.

6. The Governor in Council may make it a condition of the subsidies hereby granted, or of any heretofore granted by any Act of Parliament as to which a contract has not yet been entered into between Her Majesty and the company for the construction of the railway, that the company shall lay its road with new steel rails made in Canada, if such rails are procurable in Canada of suitable quality upon terms as favourable as other rails can be obtained upon, of which the Minister of Railways and Canals shall be the judge.

7. Every company receiving a subsidy under this Act, its successors or assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the government of Canada transportation for men, supplies, material and mails over the portion of its line in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars, properly equipped, for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the minister of the department of the government for which such service is being performed and the company performing it, and in case of disagreement then at such rates as are approved by the Governor in Council; and in or towards payment for such charges the government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of subsidy received by the company under this Act.

8. As respects all railways for which subsidies are granted by this Act, the company at any time owning or operating any of the said railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers showing the cost of constructing the railway, the cost of operating it, and the earnings thereof.

9. Paragraph 20 of section 2 of chapter 7 of the statutes of 1899 is amended by inserting after the word 'railway,' in the third line, the words 'or to connect the said lines.'

10. The subsidy provided for by chapter 7 of the statutes of 1899 towards the construction of a railway bridge over the St. Lawrence River at Chaudière Basin, near Quebec, shall be deemed to be applicable, as to one-third thereof, to the substructure and approaches, and as to two-thirds thereof to the superstructure, and the said subsidy may be paid upon that basis by authority of the Governor in Council, upon progress estimates to be furnished from time to time by the Chief Engineer of Government Railways and Canals, so that one-third of such subsidy, and no more, may be paid in respect of and upon completion of the masonry of the substructure and approaches of the said bridge, one-third, and no more, upon the work and material of one-half of the superstructure being done and supplied, in respect of such work and material, and the remaing one-third upon the completion of the whole work.

By the Act 1st Edward VII., chapter 7 (*Assented to May 23, 1901.*)

1. In this Act, unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost, and shall include the amount expended upon any bridge, up to and not exceeding $25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of terminals and right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of Government Railways, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

2. The Governor in Council may grant a subsidy of $3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than $15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than $15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of $3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of $15,000 per mile, such subsidy not exceeding in the whole the sum of $6,400 per mile;—

516. For a line of railway from a point on the Intercolonial Railway at or near New Glasgow to Country Harbour, Nova Scotia, and from a point at or near Country Harbour Cross Roads to Guysborough, in lieu of the subsidies granted by 1897, cap. 4, and 1899, cap. 7, sec. 2, paragraph 34, not exceeding 80 miles.

517. To the Quebec and New Brunswick Railway Company, for a line of railway from a point at or near St. Charles or at or near Chaudière Junction or a point on the Quebec Central Railway, near St. Anselme, Quebec, towards the present terminus of the St. Francis Branch of the Témiscouata Railway, New Brunswick, not exceeding 45 miles, and for a line of railway from the mouth of the St. Francis River, New Brunswick, westerly towards Chaudière Junction, not exceeding 15 miles, in lieu of the subsidy granted by 1900, cap, 8, sec. 2, paragraph 23; also for a line of railway in extension of the St. Francis Branch of the Témiscouata Railway to the mouth of the St. Francis River, New Brunswick, in lieu of the subsidy granted by 1899, cap. 7, sec. 2, paragraph 43, not exceeding 3 miles; in all not exceeding 63 miles.

518. To the Montreal and Province Line Railway Company, for a line of railway from Farnham, Quebec, to Frelighsburg, in lieu of the subsidy granted by 1900, cap. 8, sec. 2, paragraph 37, not exceeding 19 miles.

519. For a line of railway from a point on the Intercolonial Railway at or near Windsor Junction to Upper Musquodoboit, in lieu of 1897, cap. 4, sec. 2, paragraph 23, not exceeding 40 miles.

520. For a line of railway from Pubnico, Nova Scotia, to Port Clyde or Clyde River, in lieu of the unexpended balance of subsidy granted by 1897, cap. 4, sec. 2, paragraph 29, not exceeding 31 miles.

521. To the Toronto, Lindsay and Pembroke Railway Company, for a line of railway from the western terminus of the 20 miles subsidized by 1899, cap. 7, sec. 2, paragraph 47, westerly towards Bancroft, not exceeding 20 miles, in lieu of the subsidy granted by 1900, cap. 8, sec., 2 paragraph 3; also from the terminus of previously subsidized lines at a point about 40 miles west of Golden Lake, westerly to Bancroft, not exceeding 11 miles; in all not exceeding 31 miles.

522. For a line of railway from Chipman Station, New Brunswick, to Gibson, in lieu of the subsidies granted by 1897, cap. 4, and 1899, cap. 7, sec. 2, paragraph 31, not exceeding 45 miles.

523. To the Inverness and Richmond Railway Company, for a line of railway from a point at or near Point Tupper on the Intercolonial Railway, to Broad Cove and Cheticamp, Nova Scotia, in lieu of the subsidies granted by 1897, cap. 4, 1899, cap. 7, sec. 2, paragraph 29, and 1900, cap. 8, sec. 2, paragraph 27, not exceeding 98 miles.

524. For a line of railway from Caplin to Paspebiac, Quebec, in lieu of the subsidy granted by 1899, cap. 7, sec. 2, paragraph 15, the subsidy contract to be entered into with the trustees or receivers under mortgage from the Atlantic and Lake Superior Railway Company, and to contain the conditions that the subsidy when earned shall be paid in the following manner:—

1st. To the Hamilton Bridge Works Company in payment for bridge superstructures on the said section of railway, when furnished and erected by that company, not to exceed $35,000;

2nd. For the completion of the road-bed and works incidental thereto;

3rd. Towards payment of overdue balances, pro rata, in settlement of claims for labour, boarding-house claims, and material and supplies furnished in connection with the construction of the said section of railway; in all not exceeding 30 miles.

525. To the Schomberg and Aurora Railway Company, for a line of railway from a point on the Grand Trunk Railway between King and Newmarket, Ontario, to Schomberg, in lieu of the subsidy granted by 1897, cap. 4, not exceeding 15 miles.

526. To the Ottawa and Gatineau Railway Company, for a line of railway from the end of the 62nd mile subsidized, towards Désert, in lieu of the subsidy granted by 1897, cap. 4, sec. 2, paragraph 5, not exceeding 20 miles.

527. To the Restigouche and Western Railway Company, for its line of railway from Campbellton on the Intercolonial Railway, New Brunswick, towards Grand Falls, in lieu of the subsidy granted by 1897, cap. 4, sec. 2, paragraph 10, not exceeding 20 miles.

528. To the Pontiac Pacific Junction Railway Company, for 36 miles of its railway from a point at or near Shawville, crossing the Ottawa River via Calumet Island to Pembroke, including the bridging of both channels of the Ottawa River at Calumet Island, 14 miles of which shall be in lieu of the unexpended balance of subsidy granted by 1897, cap. 4, sec. 3, paragraph 2, not exceeding $115,200.

529. To the Manitoulin and North Shore Railway Company, for its line of railway, from a point on its line of railway between Sudbury and Little Current to its junction with the line of the Algoma Central and Hudson Bay Railway, at or near Goulais River, in addition to and in further extension of its railway subsidized by 1900, cap. 8, sec. 2, paragraph 6, an additional mileage not exceeding 130 miles.

530. For a line of railway from Grandique Ferry, Nova Scotia, to Arichat, not exceeding 8 miles.

531. To the Central Ontario Railway Company, for a further extension of its line of railway, subsidized by 1900, cap. 8, sec. 2, paragraph 5, northward, to a junction with the Canada Atlantic Railway, at or near Whitney, Ontario, not exceeding 20 miles.

532. To the Kingston and Pembroke Railway Company, for a line of railway from a point at or near Sharbot Lake, Ontario, via Lanark, to Carelton Place, not exceeding 41 miles.

533. To the Norwood and Apsley Railway Company, for a line of railway from Norwood, Ontario, to the village of Apsley, not exceeding 30 miles.

534. For a line of railway from a point on the Dominion Atlantic Railway at or near Wolfville, Nova Scotia, to the Government pier on the Basin of Minas, not exceeding one mile.

535. To the Algoma Central and Hudson Bay Railway Company, for a line of railway from Sault Ste. Marie to a point on the Canadian Pacific Railway at or near White River, in the district of Algoma, in extension of the subsidy granted to the Algoma Central Railway by 1899, cap. 8, sec. 2, paragraph 23, and by 1900, cap. 8, sec. 2, paragraph 4, a further and additional mileage not exceeding 135 miles.

536. For a line of railway from Bridgetown, Nova Scotia, to Middleton, in extension of the line subsidized by 1900, cap. 8, sec. 2, paragraph 28, not exceeding 11 miles.

537. For a line of railway from a point on the Grand Trunk Railway at or near Burk's Falls, Ontario, to the Maganetawan River, not exceeding two miles.

538. For a line of railway between Halifax and the Central Railway, Nova Scotia, from the end of the 40th mile from Halifax, subsidized by 1900, cap. 8, sec. 2, paragraph 40, to a junction with the Central Railway, Nova Scotia, not exceeding 30 miles.

539. For a line of railway from a point on the Algoma branch of the Canadian Pacific Railway at or near Bruce Lake Station, northerly to a point at or near Rock Lake, in the district of Algoma, not exceeding 9 miles.

540. For a line of railway from Roberval, Quebec, westward towards James Bay, not exceeding 60 miles.

541. For a line of railway from a point upon the Stonewall branch or the Selkirk branch of the Canadian Pacific Railway to Icelandic River by way of Gimli, not exceeding 35 miles.

542. To the Restigouche and Western Railway Company, for an extension of its line of railway from the 50th mile from Campbellton already subsidized, westward, to effect a junction with its line of railway subsidized 27 miles east from the St. John River, not exceeding 33 miles.

543. For a line of railway from Duncan Lake towards Lardo or Arrow Lake, British Columbia, or from Lardo to Arrow Lake, in lieu of the subsidy granted by 1900, cap. 8, sec. 2, paragraph 21, not exceeding 30 miles.

3. The Governor in Council may grant to the Ottawa and Gatineau Railway, for its unearned balance of subsidy upon the 62 miles of its line of railway from Hull towards Désert, granted by 1897, chap. 4, sec. 3, paragraph 3, a sum not exceeding $35,872.

4. The subsidies hereby authorized, and any subsidies heretofore authorized under any Act of Parliament of Canada still in force but not fully paid, towards the construction of any railway or bridge, shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless otherwise expressly provided in this Act, at the option of the

Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows:—

(*a.*) upon the completion of the work subsidized; or

(*b.*) by instalments, on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken; or

(*c.*) upon progress estimates on the certificate of the Chief Engineer of Government Railways, that, in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than sixty thousand dollars; or

(*d.*) with respect to (*b.*) and (*c.*), part one way, part the other.

5. The subsidy of 66 miles granted to the Manitoulin and North Shore Railway Company for a line of railway between Little Current, on Manitoulin Island, and Sudbury, Ontario, by paragraph 6 of section 2 of chapter 8 of the statutes of 1900, may be contracted for with the company and paid, and the work may be begun and prosecuted in two sections, the first beginning at or near Victoria Mines, in the township of Denison, and extending to Sudbury, and thence north-easterly towards Lake Wahnapitae, not exceeding 33 miles; the second section beginning at Little Current and extending to and connecting with the Canadian Pacific Railway at or near Stanley, in the township of Baldwin, on the Canadian Pacific Railway, not exceeding 31 miles; subject, however, to the company carrying out the undertakings contained in paragraph 6 of section 2 of chapter 8 of the statutes of 1900.

6. The subsidies hereinbefore authorized to be granted to companies named, shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as establish to the satisfaction of the Governor in Council their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August, 1901, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by the Governor in Council, and shall also be constructed upon a location, and according to descriptions, conditions, and specifications approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in each case in a contract between the company and the said Minister, which contract the Minister, with the approval of the Governor in Council, is hereby empowered to make.

7. The granting of such subsidies, and the receipt thereof by the respective companies, shall be subject to the condition that the Governor in Council may at all times provide and secure to other companies such running powers, traffic arrangements, and other rights, as will afford to all railways connecting with those so subsidized, reasonable and proper facilities in exercising such running powers, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the Governor in Council shall have absolute control, at all times, over the rates and tolls to be levied and taken by any of the companies, or upon any of the railways hereby subsidized.

8. Every company receiving a subsidy under this Act, its successors and assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation for men, supplies, materials and mails over the portion of the line in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars properly equipped for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the Department of the Government for which such service is being performed and the company performing it, and, in case of disagreement, then at such rates as are approved by the Governor in Council; and in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of the subsidy received by the company under this Act.

9. As respects all railways for which subsidies are granted by this Act, the company at any time owning or operating any of the railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers, showing the cost of constructing the railway, the cost of operating it, and the earnings thereof.

10. The Governor in Council may make it a condition of the grant of the subsidies herein provided, or any heretofore authorized by any Act of Parliament as to which a contract has not yet been entered into with the company for the construction of the railway, that the company shall lay its road with new steel rails, made in Canada, if they are procurable in Canada of suitable quality, upon terms as favourable as other rails can be obtained, of which the Minister of Railways and Canals shall be the judge.

LAND SUBSIDIES.

By 47 Vic., chap. 25, clause 7, 1884 (*Assented to April 19, 1884*):—

1. The Governor in Council is hereby authorized in aid of the construction of a railway from some point on the Canadian Pacific Railway to Hudson's Bay, to make a free grant of not more than six thousand four hundred acres for each mile of railway within Manitoba, and not more than twelve thousand eight hundred acres for each mile in the North-west Territories.

By 48--49 Vic., chap. 60, 1885 (*Assented to July 20, 1885.*)

2. To the North-western Coal and Navigation Company (Limited), Dominion lands to an extent not exceeding three thousand eight hundred acres for each mile of the company's railway, from Medicine Hat to the coal banks on the Belly River, about one hundred and ten miles.

3. To the Manitoba and South-western Colonization Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway from its commencement at Winnipeg to its terminus at Whitewater Lake, about one hundred and fifty miles.

4. To the Manitoba and North-western Railway Company, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's railway, for the whole distance from Portaga la Prairie to the crossing of the South Branch of the River Saskatchewan, twenty miles from Prince Albert, about four hundred and thirty miles.

5. To the Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway, from its commencement near Regina to the navigable waters of Long Lake.

'The said grants, and each of them, may be so made in aid of the construction of the said railways respectively, in the proportion and upon the conditions fixed by the Orders in Council made in respect thereof,—each of the said enterprises being respectively subject to any modification thereof which may hereafter be made by the Governor in Council; and except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash on the issue of the patents therefor.'

By 49 Vic., cap. 11, 1886 (*Assented to June 2, 1886*):—

6. To the Manitoba and North-western Railway Company, Dominion lands to the extent of six thousand four hundred acres per mile for each mile of the company's branch railway running from a point on the main line of that railway, at or near Todburn, in a north-westerly direction through the county of Russell to the Assiniboine River, near the town of Shellmouth, about twenty-six miles.

*7. To the North-west Central Railway Company, or to such other company as may undertake the construction of the railway, or a railway from a point on the Manitoba and North-western Railway via Rapid City, westward, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's railway, for the whole distance from Brandon station on the Canadian Pacific Railway, or from such point on the Manitoba and North-western Railway as aforesaid, to Battleford, in the provisional district of Saskatchewan, about four hundred and fifty miles.

†8. To the Wood Mountain and Qu'Appelle Railway Company, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's railway for the whole distance commencing at a point in township number four, in range number thirty, west of the second meridian, in the Dominion lands system of survey, passing through the town of Fort Qu'Appelle to join the Manitoba and North-western Railway at a point to be fixed for that purpose by the Governor in Council, about two hundred and forty miles

'The said grants, and each of them, may be so made in aid of the construction of the said railways respectively, in the proportions and upon the conditions fixed by the Orders in Council made in respect thereof,—each of the said enterprises being respectively subject to any modification thereof which may hereafter be made by the Governor in Council; and, except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively, of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash on the issue of the patents therefor.'

By section 5 of this Act authority was given for the incorporation by the Governor in Council of a company to construct the line from Brandon, or other point indicated, to Battleford, subsidized by this Act.

By 50–51 Vic., cap. 22, 1887 (*Assented to June 23, 1887*):—

9. The subsidy to the North-western Coal and Navigation Company, granted by 49 Vic., chap. 60, was increased from 3,800 acres per mile to 3,840 acres per mile.

By 50–51 Vic., cap. 23, 1887 (*Assented to June 23, 1887*):—

†10. To the Alberta and Athabasca Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway from some point on the Bow River or Canadian Pacific Railway, at or between Calgary and Crowfoot Creek, to a point near the town plot of Edmonton, about three hundred miles.

11. To the Qu'Appelle, Long Lake and Saskatchewan Railway and Steamboat Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway, from a point near the northern terminus of the completed portion of that railway, at or near Long Laketon, on the navigable waters of Long Lake, to a point at or near where the fifty-second parallel of latitude crosses the South Saskatchewan River, thence to a point at or near the elbow of the North Saskatchewan River, with branches to Prince Albert and Battleford, about three hundred and twenty-five miles.

†12. To the Medicine Hat Railway and Coal Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway, from a point at or near Medicine Hat, on the line of the Canadian Pacific Railway, to the coal field in or near townships twelve and thirteen,

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*Lapsed except for the subsidy earned for the 50 miles constructed.

†The subsidies in land grants for the Wood Mountain and Qu'Appelle, the Alberta and Athabasca and the Medicine Hat railways have lapsed.

range six, west of the fourth principal meridian, a distance of about eight miles to be selected out of such lands as are at the disposal of the Government in the proximity of the line of the company's railway.

'The said grants, and each of them may be so made in aid of the construction of the said railways respectively, in the proportions and upon the conditions fixed by the Orders in Council made in respect thereof, each of the said enterprises being respectively subject to any modification thereof which may hereafter be made by the Governor in Council; and, except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively, of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash on the issue of the patents therefor.'

By 52 Vic., chap. 4, 1889 (*Assented to May 2, 1889*) :—

13. To the North-western Coal and Navigation Company (Limited), in addition to the grant provided for by section one of the Act passed in the session held in the forty-eighth, and forty-ninth years of Her Majesty's reign, and chaptered sixty, Dominion lands to an extent not exceeding two thousand six hundred acres for each mile of the company's railway from Dunmore station on the Canadian Pacific Railway, to Lethbridge, on the Belly River, the present terminus of the said railway, a distance of one hundred and nine and one-half miles,—such additional grant to be made only on condition that the gauge of the said railway be made standard width; and also to the said North-western Coal and Navigation Company (Limited), Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway from Lethbridge to the international boundary, a distance of about fifty miles.

14. To the Red Deer Valley Railway and Coal Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway from Cheadle Station, on the Canadian Pacific Railway, to its terminus at a point in or near township twenty-nine, range twenty-three west of the fourth meridian, a distance of about fifty-five miles.

***15.** To the North-western Railway Company of Canada, Dominion lands to an extent not exceeding ten thousand acres for each mile of the company's railway from Calgary, on the Canadian Pacific Railway, northerly to a point on the North Saskatchewan River, at or near Edmonton, a distance of about two hundred and ten miles; and also to the said North-western Railway Company of Canada, Dominion lands to an extent not exceeding ten thousand acres for each mile of the company's railway from Calgary southerly to Lethbridge, a distance of about one hundred and twenty miles.

16. To the Lake Manitoba Railway and Canal Company, Dominion lands to an extent not exceeding six thousand acres for each mile of the company's railway from Portage la Prairie to the southern boundary of Lake Manitoba, a distance of about seventeen miles.

'The said grants, and each of them, may be so made in aid of the construction of the said railways respectively, in the proportions and upon the conditions fixed by the Orders in Council made in respect thereof, and except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively, of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash on the issue of the patents therefor.

'The Governor in Council may make the grant of land provided for by section three of the Act forty-ninth Victoria, chapter eleven, being for the line of the Wood Mountain and Qu'Appelle Railway, of about two hundred and forty miles in length, applicable to the line of railway of the said company, as authorized by the Act respecting the Wood Mountain and Qu'Appelle Railway Company, passed during the present session of Parliament, upon the like terms and subject to the like conditions as those upon which the grant hereinbefore mentioned was authorized to be made to the said company by the Act in this section first cited.'

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*The North-western Railway of Canada land grant subsidy has lapsed.

By the Act 53 Vic., cap. 4, 1890 (*Assented to May 16, 1890*) :—

17. To the Canadian Pacific Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile for a branch line to be constructed from Glenboro' westerley a distance of about sixty miles to a point on the proposed branch railway of the said company running from Brandon south-westerly.

18. To the Canadian Pacific Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile for a branch line of railway from a point at or near Brandon, on the main line of the Canadian Pacific Railway, south-westerly to or near township three, range twenty-seven, west of the first principal meridian, and thence westerly, a total distance of one hundred miles; and also a similar grant, at the same rate per mile, for the said company's proposed branch railway from a point on the line just described at or near township three, range twenty-seven, west of the first principal meridian, easterly to Deloraine, a distance of about twenty-five miles, making the total length of railway to which this grant is applicable one hundred and twenty-five miles.

***19.** To the Brandon and South-western Railway Company, Dominion lands to an extent not less than six thousand four hundred acres per mile for the line of railway from a point in township one, in either range twenty-three or twenty-four west of the first principal meridian, to Deloraine, a distance of about seventeen miles.

***20.** To the Lac Seul Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile for a line of railway from a point at or near Shelly Station, on the main line of the Canadian Pacific Railway, to a point at or near White Mud Lake, on the Winnipeg River, a distance of about eighteen miles.

21. To the Calgary and Edmonton Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway from Calgary to a point at or near Edmonton on the North Saskatchewan River, a distance of about one hundred and ninety miles; and also a grant of six thousand four hundred acres for each mile of the company's railway from Calgary to a point on the international boundary between Canada and the United States, a distance of about one hundred and fifty miles.

***22.** To the North-western Coal and Navigation Company (Limited) Dominion lands to an extent not exceeding three thousand eight hundred and forty acres for each mile of the company's railway from Lethbridge to the Crow's Nest Pass, a distance of about one hundred miles.

23. To the Lake Manitoba Railway and Canal Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile, for a line of railway from Portage la Prairie to Lake Winnipegosis, at or near Meadow Portage, a distance of about one hundred and twenty-five miles.

24. To the Manitoba and South-eastern Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile, for a line of railway from Winnipeg southerly or south-easterly to a point on the west side of the Lake of the Woods, a distance of about one hundred and ten miles.

The said grants and each of them may be made in aid of the construction of the said railways respectively, in the proportion and upon the conditions fixed by the Orders in Council made in respect thereof, and except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash, on the issue of the patents therefor.

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* The land grant subsidy to the Brandon and South-western, the Lac Seul and North-western Coal and Navigation railways has lapsed.

The lands by this Act authorized to be granted to the Canadian Pacific Railway Company shall be taken and held, and may be disposed of, free and clear of any encumbrance on the lands or property of the said company created before the passing of this Act.

By the special Act 53 Vic., cap. 3, 1890 (*Assented to March 26, 1890*):—

25. The Act 52 Victoria, chapter 4, authorizing, in error, the grant of land to the North-western Coal and Navigation Company, for fifty miles from Lethbridge to the international boundary, was amended—the said grant being made to the Alberta Railway and Coal Company.

By 54–55 Vic., cap. 9, 1891 (*Assented to September 30, 1891*) :—

26. In lieu of the subsidy in land authorized by the Act 52 Victoria, chapter 4, to be granted to the Red Deer Valley Railway and Coal Company, and subject to the conditions in the said Act mentioned, the Governor in Council may grant Dominion lands to the said company to an extent not exceeding six thousand four hundred acres for each mile of the said company's railway, from the town of Calgary, in the district of Alberta, in the North-west Territories, to a point in or near township twenty-nine, range twenty-three, west of the fourth meridian, a distance of about fifty-five miles.

By 54-55 Vic., cap. 10, 1891 (*Assented to September 30, 1891*):—

27. To the Manitoba South-western Colonization Railway Company, in addition to the subsidy for one hundred and fifty miles of railway authorized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter sixty, Dominion lands to the extent of six thousand four hundred acres per mile for the balance of the two hundred and twelve miles of railway which have been constructed and are in operation, that is to say, for a distance of sixty-two miles.

28. Also, to the Manitoba South-western Colonization Railway Company, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's branch line of railway from Carmen to Barnsley, a distance of about six and one-quarter miles.

29. To the Canadian Pacific Railway Company, in addition to the subsidy authorized by the Act 53 Victoria, chapter 4, for the company's branch line running in a south-westerly and westerly direction from a point at or near Brandon for a distance of one hundred miles, Dominion lands to the extent of six thousand four hundred acres for each mile of the extension westward of the said branch line, from the western limit of the said one hundred miles to a point at or near La Roche Percée, situated in township one, range six, west of the second meridian, a distance of about sixty miles.

'The said grants and each of them shall be made in aid of the construction of the said railways respectively, in the proportion and upon the conditions fixed by the Orders in Council made in respect thereof, and, except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively, of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash, on the issue of the patents therefor.'

By the Act 57-58 Vic., cap. 6, 1894 (*Assented to July 23, 1894*):—

***30.** To the Rocky Mountain Railway and Coal Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile for a line of railway from a point at or near Olds Station on the line of the Calgary and Edmonton Railway in a westerly direction to the Red Deer River and thence along the said river in a westerly direction to the coal fields, a distance of about sixty miles.

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*The land grant subsidy to the Rocky Mountain Railway and Coal Company has lapsed.

31. To the Canadian Pacific Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile for a line of railway from a point at or near Souris on the Souris Branch of the Canadian Pacific Railway, in a westerly direction to the Pipestone Valley, a distance of about thirty-two miles.

***32.** To the Brandon and South-western Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile for a line of railway from a point in township one, in either range twenty-three or twenty-four west of the first principal meridian, to a point at or near Deloraine, a distance of about seventeen miles.

33. To the Saskatchewan and Western Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile for a line of railway from Minnedosa to Rapid City, a distance of about fifteen miles.

The said grants and each of them may be made in aid of the construction of the said railways respectively in the proportion and upon the conditions fixed by the Orders in Council made with respect thereto; and, except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of the survey of the lands and incidental expenses at the rate of ten cents per acre in cash on the issue of the patents therefor.

The lands authorised by this Act to be granted to the Canadian Pacific Railway Company shall be taken and held, and may be disposed of, free and clear of any encumbrance on the lands and property of the said company created before the passing of this Act.

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*The land grant subsidy to the Brandon and South-western Railway Company has lapsed.

PART IV

MISCELLANEOUS STATEMENTS

No.

SUBSIDY Agreements for the Construction of Railways

Number of Contract.	Date of Signature.	Name of Railway.	Line of Railway to be Constructed.	Acts of Canada granting Subsidies.
13947	Aug. 29, 1900.	Central Ontario Ry. Co..	From Coe Hill or Rathbun Station to Bancroft.	62-63 V., c. 7
13948	Sept. 15, 1900.	Cape Breton Ry. and Extension Co.	From Port Hawkesbury to St. Peter's, N.S.	62-63 V., c. 7
14115	Jan. 19, 1901.	Chateauguay and Northern Ry. Co.	Bridge over E. and W. Channels of Riviere des Prairies.	63-64 V., c. 8
14116	" 19, 1901.	" " ..	From Hochelaga Ward, Montreal, to point on Great Northern Ry., near Joliette.	63-64 V., c. 8
14117	" 19, 1901.	" " ..	Bridge over Lac Ouareau..................	63-64 V., c. 8
13874	July 4, 1900.	Great Northern Ry. Co..	Branch from main line to Shawinigan Falls.	62-63 V., c. 7
13910	" 26, 1900.	" " ..	Between Montcalm and St. Tite Junction on Lower Laurentian Ry.	62-63 V., c. 7
14090	Oct. 1, 1900.	Grand Trunk Ry. Co....	Victoria Bridge. Supplementary subsidy..	63-64 V., c. 8
13973	" 10, 1900.	Ottawa and New York Ry. Co.	Bridge over St. Lawrence River at Cornwall.	63-64 V., c. 8
14018	Nov. 26, 1900.	Pontiac Pacific Junction Ry. Co. and Ottawa and Gatineau Ry. Co.	Interprovincial Bridge, Ottawa River	63-64 V., c. 8
13988	" 12, 1900.	Quebec Bridge Co.	Bridge over St. Lawrence River at Chaudière Basin, near Quebec.	62-63 V., c. 7 and 63-64 V., c. 8
13956	Sept. 10, 1900.	St. Mary River Ry. Co..	From a point on the Alberta Ry. and Coal Co's. Ry. towards Cardston, N.W.T.	63-64 V., c. 8
14221	June 29, 1901.	South Shore Ry. Co.....	Bridge over St. Francois River....... ..	63-64 V., c. 8
14142	Mar. 15, 1901.	Thousand Islands Ry. Co.	Extension from present northerly terminus to a point easterly.	63-64 V., c. 8

OTTAWA, Sept. 5, 1901.

1.

entered into during the Fiscal Year ended June 30, 1901.

Amount of Subsidy.		Number of Miles Subsidized.	Maximum Grade Feet per Mile.	Radius of Curvature not less than.	Width of Clearing each side.	Width of Cutting.	Embankment.	Steel Rails, lbs., per Lineal Yard.	Date for Completion.
Per Mile.	Not exceeding.								
$	$		Feet.	Feet.	Feet.	Feet.	Feet.	Lbs.	
3,200	6,400 p. mile	21	80	717	50	20	15	56	Sept. 1, 1901.
3,200	6,400 "	30	80	819	50	20	15	56	Dec. 1, 1902.
....	150,000	....	....	....	....	....	....	....	Jan. 1, 1903.
3,200	6,400 p. mile	42	53	1,433	50	20	15	56	" 1, 1903.
....	15,000	....	....	....	....	....	....	....	" 1, 1903.
3,200	6,400 p. mile	6½	68·7	403	50	20	15	56	Sept. 20, 1900.
3,200	6,400 "	53½	53	1,433	50	20	15	56	Aug. 31, 1901.
....	230,000	....	....	....	....	....	....	....	" 1, 1902.
....	90,000	....	....	....	....	....	....	....	Dec. 31, 1900.
....	100,000	....	....	....	....	....	....	....	Aug. 1, 1901.
....	1,000,000	....	....	....	....	....	....	....	Jan. 1, 1903.
2,500		30	79·2	3,831	50	12	8	28	Dec. 13, 1900.
....	50,000	....	....	....	....	....	....	....	May 1, 1903.
3,200	6,400 p. mile	2	43	3,274	50	20	15	56	Feb. 1, 1902.

GERARD RUEL,
Law Clerk.

No. 2.

Contracts entered into during the Fiscal Year ended June 30, 1901.

1. INTERCOLONIAL RAILWAY.

No. of Contract.	Date of Signature.	Contractor.	General Description.
13878	July 24, 1900	Henry White....	Paint buildings and bridges between Campbellton and Newcastle.
13879	″ 21, 1900	W. McD. Metzler..	Paint some stations between Campbellton and Newcastle.
13880	″ 6, 1900	John Culligan	Improve Jacquet River Station.
13904	″ 6, 1900	J. A. Boulay	Remodel Flatlands Station and build platform.
*13905	August 4, 1893	Town of Sydney.............	Supply water at Sydney.
13906	July 21, 1900	Wilson Estabrooks..........	Handling of coal at Moncton.
13907	″ 19, 1900	Peter Campbell.............	Construct station and freight shed at Passekeag, N.B.
*13912	″ 30, 1899	Intercolonial Coal Mining Co.	Supply 30,000 tons of coal.
13913	″ 24, 1900	H. & H. M. Copp	Construct station and freight shed at Plumweseep, N.B
13917	″ 13, 1900	Lowe, McManus & Horne....	Grading and tracklaying at Sydney and North Sydney Junction.
13927	″ 21, 1900	A. Caron & L. Vaillancourt ..	Paint buildings and bridges between Chaudiére and Rivière du Loup.
13933	Aug. 17, 1900	Dussault & Lemieux..........	Construct a quay wall at Lévis.
13939	Sept. 6, 1900	Sir W. G. Armstrong, Whitworth & Co., Ltd..........	Construct railway ferry steamer.
13946	July 19, 1900	Emile Dube.....	Construct building for baggage, &c., at Rivière du Loup.
13951	Aug. 28, 1900	Rhodes, Curry & Co., Ltd....	Remodel and enlarge engine house at Campbellton, N.B.
13952	Sept. 24, 1900	The Dickson Mfg. Co.........	Supply 6 locomotives.
13961	″ 14, 1900	George A. Appleby.....	Erect 2 covered platforms at St. John, N.B.
13962	″ 4, 1900	Beazley Bros...	Submarine rock blasting and dredging at Halifax, N.S.
13964	″ 15, 1900	Dominion Bridge Co., Ltd....	Erect bridge over Etchemin River, 1⅝ mile off Hadlow Station.
13995	Oct. 22, 1900	E. F. Munro........... ...	Erect station at Westville, N.S.
13997	″ 25, 1900	John Culligan.....	Erect stations and freight sheds at Beresford, Green Point and Nigadoo
13998	″ 30, 1900	Napoleon Degagne............	Erect station and freight shed at Dessaint, Que.
13999	″ 30, 1900	Joseph Danjou	Erect station and freight shed at Gagnon, Que.
14000	″ 30, 1900	O. Rousseau.................	Erect station and freight shed at Ste. Perpétue, Que.
14001	″ 31, 1900	Nathan E. Montgomery	Erect dwelling house for agent at St. Nicholas, Que.
14002	″ 31, 1900	″ ″	Erect station and freight shed at Rivière du Chéne, Que.
14003	″ 31, 1900	Dussault & Lemieux..........	Filling of ponds and beaches at Lévis.
14004	″ 22, 1900	Edmund Simpson....... ...	Extend freight house and platform at Petitcodiac, Que.
14007	″ 8, 1900	Rhodes, Curry & Co., Ltd....	Construct a 6-stall engine house at Sydney, C.B.
14008	Sept. 28, 1900	″ ″ ...	Construct an 18-stall engine house at Stellarton, N.S.
14009	Oct. 25, 1900	John McDougall & Co..	Supply 300 33″, 100 30″, 50 26″ and 25 24″ car wheels.
14010	Nov. 16, 1900	″ ″	Supply 2,000 car wheels.
14015	″ 26, 1900	The Dickson Mfg. Co.........	Supply 6 locomotives.
14021	″ 5, 1900	John McDougall & Co..	Supply 2,000 33″ car wheels.
14023	Sept. 20, 1900	Willard Kitchen.............	Work to sidewalks and block-paving at Christie's Crossing Subway, Amherst.
14027	Oct. 31, 1900	Jules F. Esnouf......... ...	Erect station at St. Wenceslas, Que.
14028	″ 31, 1900	″ ″	Erect station at Maddington Falls, Que.
14029	″ 31, 1900	Honore Huard............ .	Erect station at St. Romuald, Que.
14031	Dec. 8, 1900	Lachance & Fils.............	Remodel and enlarge Rivière du Loup Station.
14034	Nov. 30. 1900	J. B. McManus.............	Excavate, lay pipes, &c., *re* water supply at Grand Narrows, C.B.
14035	″ 30, 1900	″ ″	Excavate, lay pipes, &c., *re* water supply at St. Charles Junction.

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*Received too late for last year's report.

No. 2.—Contracts entered into during the Fiscal Year ended June 30, 1901.—*Con.*

1. INTERCOLONIAL RAILWAY—*Continued.*

No. of Contract.	Date of Signature.	Contractor.	General Description.
14036	Dec. 1, 1900	Murdock G. Mann	Erect station and dwelling at Moffat's, N.B.
14037	" 1, 1900	" "	Erect station, dwelling and freight shed at St. Alexis, Que.
14039	Nov. 5, 1900	Montreal Car Wheel Co.	Supply 2,000 33" car wheels.
14042	Dec. 19, 1900	Manchester Locomotive Works Co	Supply 10 locomotives.
14051	" 21, 1900	Barney Smith Car Co	Supply 6 first class passenger, 3 dining and 4 sleeping cars.
14053	" 7, 1900	W. T. Chapman	Erect station at Barnaby River.
14054	" 6, 1900	J. McKenna & H. White	Erect baggage room at Bathurst.
14055	" 1, 1900	Rhodes, Curry & Co., Ltd	Erect addition to station at Nappan.
14056	" 3, 1900	C. J. Silliker.	Erect addition to baggage room at Amherst, N.S.
14057	Dec. 6, 1900.	Chas. W. Hattie	Erect an ice house at Mulgrave, N.S.
14062	" 22, 1900.	Wm. Harty et al.	Supply 20 locomotives.
14064	Nov. 15, 1900.	L. P. Morin	Erect station at Bagot, Que.
14065	" 15, 1900.	"	" St. Germain, Que.
14066	" 15, 1900.	"	" St. Eugene, Que.
14067	" 15, 1900.	"	" St. Cyrille, Que.
14068	" 15, 1900.	J. C. Auger.	" St. Apollinaire, Que.
14072	Dec. 15, 1900.	Willard Kitchen	Remodel station and erect freight shed at College bridge.
14073	" 15, 1900.	"	" station and erect freight shed, Meadowville.
14074	" 15, 1900.	"	" station and erect freight shed at Nash's creek.
14075	" 15, 1900.	"	" station and erect freight shed at East mines.
14076	" 15, 1900.	"	Erect station at Red Pine.
14077	" 15, 1900.	"	" Bartibogue.
14078	" 15, 1900.	"	" baggage room at Dalhousie.
14079	" 15, 1900.	"	Extend freight shed at Glouchester junction.
14080	" 15, 1900.	"	Erect station and freight shed at Coal Branch.
14081	" 12, 1900.	Hugh McDonald	Construct crib-work sea walls on the Sydney and Pt. Tupper and Oxford and New Glasgow Divisions
*14086	Aug. 28, 1899.	Rhodes, Curry & Co., Ltd	Supply 200 box freight cars.
*14087	" 31, 1899.	" "	" 200 platform cars.
14094	Dec. 19, 1900.	Hamilton Bridge Works Co., Ltd.	Erect bridge at Jacquet River, N.B.
14095	" 19, 1900.	Dominion Bridge Co., Ltd	" Millstream, Causapscal and Amqui.
14098	Jan. 16, 1901.	T. M. Leblanc	Construct boiler and pump house at Moncton, N.B.
14099	" 11, 1901.	Andrew Myles.	Erect station and freight shed at Torryburn, N.B.
14101	" 16, 1901.	Dominion Bridge Co. Ltd	Deliver steel bridge at St. John, N.B.
14102	" 16, 1901.	" "	" Truro, Grenville and St. Charles junction.
14113	Dec. 31, 1900.	Rhodes, Curry & Co., Ltd	Construct 17 refrigerator cars.
14114	Jan. 21, 1901.	Joseph Treen	" a 50,000 gallon water tank at Grand Narrows, C.B.
14125	Feb. 14, 1901.	Dominion Bridge Co., Ltd.	Erect bridge at Rocky Lake, N.S.
14126	" 14, 1901.	John Kelly	Divert highway at Rocky Lake and Lily Lake, N.S.
14156	April 17, 1901.	Crossen Car Mfg. Co	Supply 150 box and 200 flat cars.
14160	Mch. 1, 1901.	"	" 5 baggage cars.
14161	" 1, 1901.	"	" 5 postal and baggage cars.
14162	" 1, 1901.	"	" 6 2nd class sleeping cars.
14163	Nov. 5, 1900	Rhodes, Curry & Co., Ltd	" 1,000 box cars.
14166	" 5, 1900.	" "	" 20 stock cars.
14170	April 30, 1901.	Dominion Bridge Co., Ltd	Erect two transfer bridges at Strait of Canso.
14171	" 11, 1901.	Joseph Treen	" baggage room and extend freight shed at North Sydney, C.B.
14177	" 18, 1901.	James Fleming	Deliver a 7-ton crane.
14178	Jan. 30, 1901.	Manchester Locomotive Works	" 8 locomotives.
14189	May 14, 1901.	E. F. Monro.	Addition to engine house at Pt. Tupper, N.S.
14212	Feb. 1, 1901.	Richmond Locomotive and Machine Works	Deliver 10 locomotives.

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*Received too late for last year's report.

No. 2.—CONTRACTS entered into during the Fiscal Year ended June 30, 1901.—*Con.*

1. INTERCOLONIAL RAILWAY.—*Continued.*

No. of Contract.	Date of Signature.	Contractor.	General Description.
14213	Mar. 25 1901.	The Rathbun Co..........	Deliver 125 box freight cars.
14215	June 24, 1901.	Chas. Cammel & Co., Ltd....	„ 5,000 tons first quality steel rails.
14217	May 29, 1901.	John Johnston	Paint grain elevator at St. John, N.B.
14218	June 7, 1901.	Thos. A. Barnhill......... ...	Erect building for baggage and express rooms, &c., at Truro, N.S.
14247	„ 3, 1901.	Joseph Treen.	Erect a 50,000 gallon water tank at Stellarton, N.S.

2. PRINCE EDWARD ISLAND RAILWAY.

13965	Oct. 8, 1900.	Michael J. Haney...	Construct substructure of bridge across Hillsborough River.
14107	Feb. 13, 1901.	Wm. Harty et al.............	Deliver two locomotives.
14118	July 2, 1900..	Willard Kitchen.............	Construct section No. 2, Mutch's Point to Village Green, 11½ miles.
14127	Dec. 26, 1900.	Robert Ellis..................	Supply ties, lumber and piles.
14128	„ 26, 1900.	T. Crockett............	„ 26,000 cedar ties.
14129	„ 26, 1900.	N. H. Roy.	„ cedar fence posts and braces.
14137	„ 26, 1900.	J. & T. Jardine..............	„ ties and lumber.

3. CARILLON CANAL.

14175	April 30, 1901.	O. Martineau & Fils & Frs. Lemoine..................	Rebuild guide pier at upper entrance.

4. CORNWALL CANAL.

13975	Oct. 19, 1900..	Michael P. Davis	Supply 400 h. p. electric current and 250 electric lights.

5. FARRAN'S POINT CANAL.

13945	Sept. 15, 1900.	Canadian Construction Co. Ltd	Enlarge canal.

6. LACHINE CANAL.

14006	Nov. 12, 1900	W. McNally & Co...	Supply 12,500 barrels Portland cement.
14022	Nov. 26, 1900.	F. Hyde & Co..	„ „ „
14174	May 11, 1901.	O. Martineau & Fils	Construct flume for proposed electric power house at Cote St. Paul Locks.
14211	June 18, 1901.	J. B. Gratton.........	Erect power house at Cote St. Paul.
14266	June 20, 1901.	Ahearn & Soper, Ltd........	Construct pole line.

7. RAPIDE PLAT CANAL.

13970	Oct. 16, 1900..	Philip H. Gilbert............	Improve upper entrance.

No. 2.—CONTRACTS entered into during the Fiscal Year ended June 30, 1901.—*Con.*

8. RIDEAU CANAL.

No. of Contract.	Date of Signature.	Contractor.	General Description.
14168	April 30, 1901.	Cameron & Co.	Supply timber.

9. SAULT STE. MARIE CANAL.

14005	Nov. 14, 1900.	J. & R. Miller..............	Construct one pair lock gates.
14173	May 13, 1901.	A. F. Bowman...............	Deepen channel way at lower entrance.

10. SOULANGES CANAL.

14032	Nov. 30, 1900.	Thomas Lawson	Supply iron railings, gates, &c.
14131	Feb. 18, 1901.	G. Monpetit.	Erect toll house at Coteau landing.
14159	April 23, 1901.	Canadian General Electric Co., L't'd	Alter electrical equipment of locking gates, &c.

11. ST. OURS LOCK.

13971	Sept. 29, 1900.	Finn & Filion..	Repair dam at St. Ours.

12. TRENT CANAL.

13908	July 6, 1900.	Edward Conroy..........	Construct Glance Booms and Piers.
13928	〃 6, 1900.	The Rathburn Co..........	Supply 10,000 barrels Portland Cement.
13929	〃 28, 1900.	Owen Sound Portland Cement Co., Ltd.....	〃 5,000 〃 〃
13936	Sept. 6, 1900.	Brown & Aylmer	Construct Sec. No. 3, Simcoe & Balsam Lake Division.
13940	〃 7, 1900.	Larkin & Sangster...........	〃 No. 2, 〃 〃 〃
14182	May 28, 1901.	Lakefield Portland Cement Co., Ltd..........	Supply 3,000 barrels Portland Cement.
14187	〃 30, 1901.	Canadian Portland Cement Co., Ltd.............	〃 15,000 〃 〃
14214	June 19, 1901.	Owen Sound Portland Co., Ltd.	〃 5,000 〃 〃

13. WELLAND CANAL.

14033	Nov. 30, 1900.	Hamilton Bridge Works Co., Ltd.	Construct steel trestle to replace existing one on Bryant's Creek.
14133	March 8, 1901.	McCleary & McLean..... ...	Supply timber.
14135	〃 14, 1901.	Cunningham & Cuthbert......	Supply iron castings.
14141	〃 15, 1901.	Dean Brothers..........	Supply brass and phosphor bronze castings.
14143	〃 20, 1901.	Joseph Battle............ ...	Repair west retaining wall at head of lock 24.
14147	〃 25, 1901.	John & Thos. Riley	Work in connection with east docking at Port Dalhousie entrance.
14157	〃 30, 1901.	Mason, Gordon & Co.	Supply timber.

OTTAWA, September 5, 1901.

GERARD RUEL,
Law Clerk

No.

WATER Power and other Public Property leased by the Department of

1.—INTERCOLONIAL

No. of Lease.	Date of Signature.	Lessee.	Property Leased.	Area.
	1900.			
13881	July 21	George Lovett	Land at Deep Water Terminus, Halifax	492 sq. ft.
13882	″ 21	H. Boulay	Lot at Boulay's Siding, Rimouski County	120 sq. ft.
13966	Oct. 10	M. J. Haney	Two locomotives and 45 flat cars	
13977	″ 17	Jas. P. Sherry	Land at College Bridge, N.B	2,250 sq. ft.
14063	Nov. 1	J. A. Patterson	Land at Apohaqui, N.B.	88 sq. ft.
	1901.			
14092	Jan. 12	Jas. P. Sherry	Land at Memramcook Station	2,400 sq. ft.
14112	Feb. 13	Alp. Pineau	Land at St. Anaclet, Que	2,240 sq. ft.
14121	″ 25	Octave Poirier	Land at Assametquaghan, Que	10,000 sq. ft.
	1900.			
14144	Oct. 12	The Imperial Oil Co., Ltd.	Right of way over Ry. lands at Sydney, N.S	
14145	″ 12	″ ″	Land at Sydney, N.S	0·76 acre
	1901.			
14146	Mch. 22	A. McDonald	Land at Sylvan Valley Mills	6,750 sq. ft.
14183	May 31	Can. Pacific Ry. Co.	Land at New Glasgow, N.S	112 sq. ft.
14253	Feb. 5	The *Herald* Publishing Co., to His Majesty.	Premises on corner of St. James and St. François Xavier streets, Montreal	

2.—BEAUHARNOIS

	1900.			
13884	July 9	Montreal Cotton Co.	Land at Valleyfield, Que	13,596 sq. ft.
13978	Sept. 29	Beaubien Produce and Milling Co., Ltd.	Hydraulic lot No. 1 and building lot No. 1, Valleyfield, Que., with surplus water.	28,000 11,700 } sq. ft.
14019	Nov. 1	S. A. Brodeur	Land at Upper Entrance of canal	20 arp. 9 per.
14261	June 29	Geo. J. White	Pt. lot No. 1, N. side of canal, Valleyfield, Que.	¾ acre

3.—CARILLON

	1901.			
14186	June 3	Jno. P. Mullarkey	Parts of the bed of the Ottawa River below Carillon Dam and parcel of land.	

4.—CHAMBLY

	1900.			
13926	July 30	Can. Pacific Ry. Co.	Privilege to operate a siding along canal reserve at St. John, Que.	

3.

Railways and Canals during the Fiscal Year ended June 30, 1901.

RAILWAY.

Amount of Water Power.	Term.	Commencement of Term.	Terms of Payment.			Purpose.
			Annual Rental.	Due each year.	First instalment due.	
		1899.	$ cts.			
....	During pleasure.	Nov. 1, 1899...	0 25	Nov. 1	Nov. 1, '99	Boat house site.
....	" ..	Sept. 1, 1899....	1 00	Sept. 1	Sept. 1, '99	Warehouse site.
....	Until completion of work.	From date of delivery of rolling stock.	Locom., $5 per day, each; cars, 30c. per day, each.	....	....	Build approaches to Hillsborough Br'dge.
....	During pleasure.	Dec. 23, 1899....	1 00	June 30	Dec. 23,'99	Storing of hay.
....	" ..	Nov. 1, 1900....	1 00	Nov. 1	Nov. 1, '00	Erect milk house.
....	" ..	" "	1 00	June 30	Nov. 1, '00	Storing of hay, etc.
....	" ..	March 1, 1901...	1 00	" 30	Mch. 1, '01	Storing of shingles.
....	" ..	" " ...	1 00	" 30	" "	Erect dwelling house.
....	" ..	June 30, 1900...	1 00	" 30	Jun. 30,'00	
....	99 years.......	July 1, 1900....	40 00	" 30	" "	Storing of oil.
....	During pleasure.	March 1, 1901...	1 00	" 30	Mch. 1, '01	As a sluice way to mill.
. . ..	" ..	Sept. 1, 1900....	1 00	" 30	Sept. 1, '00	Erect a tool house.
....	3 years and 3 months.	Feb. 1, 1901....	2,750 00	Month'y	... .	Office.

CANAL.

. ...	During pleasure.	May 1, 1900. ...	133 00	May 1	May 1, '00	Extension to their dye house.
.. . .	21 years, renew.	Aug. 1, 1900....	120 00	Aug. 1	Aug. 1, '00	
....	During pleasure.	Nov. 1, 1900....	25 00	Nov. 1	Nov. 1, '00	
....	" ..	June 1, 1901.....	30 00	June 1	June 1, '01	

CANAL.

5,000 h. p. with additional h. p. not exceeding 40,000.	21 years, renewable.	May 1, 1901.....	$1.00 per horse power.	May and Nov. 1	May 1, '01	Electricity and manufacturing purposes.

CANAL.

....	21 years, renewable.	July 1, 1900.....	1 00	July 1	July 1, '00	

No. 3.—Water Power and other Public Property Leased by the

5.—CORNWALL

No. of Lease.	Date of Signature.	Lessee.	Property Leased.	Area.
	1901.			
14172	April 30	Cornwall Town........	Land between canal and St. Lawrence River, etc.	0·875 acre....
14216	June 24	W. Hodge	Land at Cornwall, Ont....................	0·31 acre.....

6.—LACHINE

No. of Lease.	Date of Signature.	Lessee.	Property Leased.	Area.
	1900.			
13911	July 9	The Lachine Rapids Hydraulic and Land Co.	Privilege to erect a line of 14 poles..........	....
13918	July 26	The Colonial Bleaching and Printing Co., Ltd.	Privilege to lay an 18-inch tile pipe and take surplus water.	....
13930	July 17	The Merchants Cotton Co.	Privilege to maintain 4 iron pipes and take surplus water.	....
13943	Aug. 30	Montreal Stock Yds. Co.	Land at Pointe St. Charles, St. Anne's Ward, Montreal.	11·091 acre..
13944	Aug. 13	J. P. Laplante & Co....	Wharf lot on E. side of new St. Gabriel Basin No. 1, Montreal.	1,750 sq. ft.
13954	Sept. 10	Geo. T. Harct.......	Lots 16 & 17 between St. Gabriel Basins Nos. 2 and 3, Montreal.	33,824 sq. ft.
13957	Aug. 20	Canada Paper Co., Ltd..	Land at Wellington Basin, Montreal........	16,250 sq. ft.
13996	〃 24	Grand Trunk Ry. Co. of Canada.	Privilege to lay a single track line of railway along the north bank of canal.	....
	1901.			
14111	Feb. 13	The Electric Fireproofing Co. of Canada, Ltd.	Privilege to lay 8-inch pipe to draw water from canal.	....
14132	Mch. 5	F. Tremblay...........	Storage lot No. 3, N.E. side of St. Gabriel Basin No. 4, Montreal.	9,444 sq. ft.
14153	April 1	The Alaska Feather and Down Co., Ltd.	Privilege to draw water through a 4-inch pipe..	....
14206	June 18	Wm. E. Muir	Pt. lot No. 324, W. side of Wellington Basin, Montreal.	·6267 acre..
14259	〃 29	The James Cooper Mfg. Co., Ltd.	Privilege to lay a 12-inch water pipe.........	....

7.—RIDEAU

No. of Lease.	Date of Signature.	Lessee.	Property Leased.	Area.
	1900.			
13909	July 25	Thos. Birkett...........	Wharf lots 9 and 10, W. side of canal, near basin, Ottawa.	6,000 sq. ft.
13934	Aug. 17	Hannah Patterson ...	Pt. of the S½ of lot letter 'G,' con. 'C,' Tp. of Nepean.	2 acres.....
13938	July 10	Alex. McLean	Pt. lot 21 in the Gore of Gloucester, water power, &c.	1·84 acres....
13953	Aug. 30	Ottawa & New York Ry. Co.	Parcel No. 4 at S.E. end of Deep Cut, Ottawa..	1·50 acres....
14011	Oct. 23	The Rideau Lakes Nav. Co., Ltd.	Land at Combined Locks, Smiths Falls........	1,225 sq. ft.
14058	Nov. 30	A. G. McCormick.......	Wharf lots Nos. 7 and 8 W. side of Canal Basin, Ottawa.	6,000 sq. ft.
	1901.			
14188	May 31	The Ottawa Forwarding Co. Ltd.	Privilege to erect a temporary shed on wharf in Canal Basin at Ottawa.	....
14208	June 18	Samuel Daniels.........	Privilege to place a Yacht House at Stewarton Bridge.	....

Department of Railways and Canals, &c.—*Continued.*

CANAL.

Amount of Water Power.	Term.	Commencement of Term.	Terms of Payment.			Purpose.
			Annual rental.	Due each Year.	First instalmen due.	
			$ cts.			
25 h. p with privilege to develop 25 h. p. additionally.	21 years, renewable.	Apri 1, 1901....	$10 land, etc. ; $2 per h. p.	April 1	Apl. 1, '01	Site for a pumping station.
....	21 years, renewable.	Oct. 1, 1900.....	1 00	Oct. 1	Oct. 1, '00	.

CANAL.

....	During pleasure.	July 1, 1900.....	1 00	July 1	July 1, '00	Transmit elect. power.
....	" ..	May 1, 1900.....	180 00	May 1	May 1, '00	Generate steam and bleaching purposes.
....	" ..	....	340 00	Jan. and July 1	July 17, '00	Condensing purposes and fire protection.
....	30 years	March 1, 1900...	500 00	March 1	Mch. 1, '00	Abattoirs.
....	During pleasure.	Aug. 1, 1900....	26 00	Aug. 1..	Aug. 1, '00	Store sand.
....	" .	Sept. 1, 1900....	422 80	Sept. 1..	Sept. 1, '00	Store coal.
....	" .	Aug. 1, 1900...	195 00	Aug. 1..	Aug. 1, '00	Storehouse.
....	21 years.........	" 1, 1900....	500 00	" 1.	" 1, '00	
....	During pleasure.	Jan. 1, 1901.....	80 00	Jan. 1..	Jan. 1, '01	Boilers and tanks.
....	" .	Mch. 1, 1901....	188 88	Mch. 1 .	Mch. 1, '01	Store lumber.
....	" .	May 1, 1900	40 00	May 1..	May 1, '00	Boilers, &c.
....	13 years.........	" 1, 1901	450 00	" 1..	" 1, '01	Store coal.
....	During pleasure.	July 1, 1901.....	120 00	July 1..	July 1, '01	Boilers, &c.

CANAL.

....	21 years.........	Aug. 1, 1900....	230 00	Aug. & Feb. 1	Aug. 1, '00	Warehouse.
....	During pleasure.	" 1, 1900....	7 00	Aug. 1..	Aug. 1, '00	Farming.
....	21 years renewable.	May 1, 1900	300 00	May 1..	May 1, '00	Mfg. or electrical purposes.
....	During pleasure.	Sept. 1, 1900....	100 00	Sept. 1..	Sept. 1, '00	
....	" .	Nov. 1, 1900....	7 50	Nov. 1..	Nov. 1, '00	To erect a w room.
....	21 years.........	Dec. 1, 1900.....	100 00	Dec. 1.	Dec. 1, '00	
....	During pleasure.	May 1, 1901	1 00	May 1 .	May 1, '01	Protection of goods
....	" .	" 1, 1901 ...	2 00	" 1.	" 1, '01	Yacht house.

No. 3.—Water Power and other Public Property Leased by the

8.—SAULT STE.

No. of Lease.	Date of Signature.	Lessee.	Property Leased.	Area.
	1900.			
13994	Sept. 29	Queen City Oil Co., Ltd.	Land in Sault Ste. Marie, Ont..	6,000 sq. ft.

9.—SOULANGES

	1901.			
14164	May 2	M. P. Davis.......... .	All surplus water from summit level...........	....

10.—ST. OURS

14985	Jan. 9	Jos. Archambault to Her Majesty.	Privilege to place timber on his land.....	... .

11.—TRENT

14123	Jan. 31	Johnson Ellis..........	Pt. lot. 48, con. 8, Tp. of Carden, Co. of Victoria, Ont.	1½ acre....

12.—WELLAND

	1900.			
13883	July 7	Maple Leaf Rubber Co..	Privilege to lay 2 electric cables under Old Canal at Port Dalhousie.	. . ....
13935	Aug. 13	Dunnville Town.........	Land in Dunnville, Ont	....
13987	Oct. 31	Calvin Tupper..........	Pt. lots 'Church of England Parsonage' and 'Jeffrey,' E. side of Chippawa St.. Welland, Ont	1⅔ acre....
14017	" 24	Niagara, St. Catharines and Toronto Ry. Co.	Privilege to lay 3 electric cables across bottom of canal.	....
14059	Nov. 30	" .	Privilege to construct a railway by means of embankments and trestles over canal.	... .
14060	Oct. 24	" .	Privilege to erect a ry. bridge over canal near Carleton St. St. Catharines, Ont.	... .
	1901.			
14082	Jan. 8	St. Catharines City et al.	Privilege to lay water mains under Old Canal..	....
	1900.			
14091	July 6	St. Catharines City.	Privilege to lay 2 water pipes from canal to cemetery.	....
	1901.			
14139	Jan. 21	Port Dalhousie Hockey Club.	Land west of west pier at Port Dalhousie, Ont.	·206 acre ...
14184	May 30	Niagara, St. Catharines and Toronto Ry Co.	Privilege to operate track line of railway at Port Dalhousie, Ont.	....

Ottawa, September 5, 1901.

Department of Railway and Canals, &c.—*Concluded.*

MARIE CANAL.

Amount of Water Power.	Term.	Commencement of Term.	Terms of Payment.			Purpose.
			Annual rental.	Due each Year.	First instalment due.	
			$ cts.			
....	During pleasure.	Oct. 1, 1900.....	10 00	Oct. 1..	Oct. 1, '00	To erect a warehouse.

CANAL.

....	21 years renewable.	May 1, 1901.....	3,000 00	May and Nov. 1	May 1, '00	Development of power.

LOCK.

....	During winter of 1901.	....	....	....	....	To repair St. Ours Dam.

CANAL.

....	During pleasure.	Jan. 1, 1901.....	10 00	Jan. 1..	Jan. 1, '01	Lime burning industry

CANAL.

....	During pleasure.	July 1, 1900	10 00	July 1..	July 1, '00	Power.
....	"	Aug. 1, 190	1 00	Aug. 1..	Aug. 1, '00	Sidewalk.
....	5 years	Nov. 1, 190	2 00	Nov. 1..	Nov. 1, '00	
....	During pleasure.	" 1, 1900	5 00	" 1..	" 1, '00	To transmit power.
....	21 years renewable.	Dec. 1, 1900	1 00	Dec. 1..	Dec. 1, '00	
....	"	Nov. 1, 1900...	1 00	Nov. 1..	Nov. 1, '00	
......	During pleasure.	May 1, 1899 ...	10 00	May 1..	May 1, '99	
....	"	July 1, 1900	10 00	July 1..	July 1, '00	
....	"	Dec. 1, 1900 ...	4 00	Dec. 1..	Dec. 1, '00	Rink.
....	10 years	May 1, 1901	40 00	May 1..	May 1, '01	

GERARD RUEL,
Law Clerk.

No.

Property Conveyed and Damages Released to the Department of

1.—CANADIAN

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
14176	Feb. 28, '98	Joseph Deroche..........	Pt. No. 7, Group III., Tp. 21	New Westminster.......
14246	" 14, '01	C. V. Cooper..........	Pts. Nos. 31, 32, 25, 26 & 27, and Nos. 13, 15, 17, 19, 33, 34 & 35, Block 1, being sub-division of No. 203, Group I., and pt. No. 203.	" .....

2.—INTERCOLONIAL

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
14119	June 25, '98	Elizabeth Wood	3 parcels of land in...............	Oxford.................
14134	Feb. 23, '01	Adelbert Wood.........	" "	" ....
14167	April 8, '01	Nova Scotia Govt.	Lands covered with water at Muggah's Creek.	Sydney.................
13915	May 31, '99	R. Tufts, *et al*	....	....
13[illegible]	April 8, '99	C. Gay, *et al*	....	....
13969	Aug. 1[illegible], '[illegible]	Drummond County Ry. Co.	....	....
14049	Dec. 13, '00	H. Cameron, *et ux*......	....	....
14050	" 11, '00	C. F. McMillan........	....	....
14179	Mar. 11, '01	Jeremie Paulin..........	....	....
14223	June 27, '01	G. S. Mayes	....	....

3.—CORNWALL

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
13921	July 21, '00	P. Cass, *et ux*..........	Pt. of front pt. of E$\frac{1}{2}$ & W$\frac{1}{2}$ of No. 7.	Osnabruck.............
14106	Oct. 19, '00	D. B. MacLennan	Pts. Nos. 31 & 32, and E$\frac{1}{2}$ No. 33, Con. 1.	Cornwall ....
14169	Mar. 5, '01	A. Waldorf, *et al.*	Pts. No. 7, Con. 1..	Osnabruck...........

4.—CULBUTE

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
13942	Sept. 13, '00	M. Worrill, *et al*........	N. pt. of the E. pt. of No. 1, 1st Range of Calumet.	Grand Calumet........
14043	Dec. 14, '00	B. Smith, *et al*........	Nos. 1, 2, 3 & 4, Range 1. ...... No. 55, Range 2..	Waltham .... Mansfield...........
14044	Oct. 12, '00	Jas. McGuire...........	No. 2, Range 7	Litchfield. ....

4.

Railways and Canals during the Fiscal Year ended June 30, 1901.

PACIFIC RAILWAY.

County.	Area.	Amount.	Remarks.
		$ cts.	
	12·80 acres	Principal 600 00 Interest 382 00	Too late for last year's report.
		Principal 4,000 00 Interest 4,487 00 Costs 491 87	

RAILWAY.

County.	Area.	Amount.	Remarks.
Cumberland	19·17 acres	165 97	Too late for last year's report.
"	19·17 "	185 63	
Cape Breton			Letters patent.
		[illegible]	Release, damages. (Too late for last year's report.)
		116 67	" " "
		20,000 00	Release for security held.
		Principal 375 00 Costs 80 46	Release, damages claimed for the death of M. A. Cameron.
		Principal 1,600 00 Costs 80 46	Release, damages for injuries sustained.
		100 00	Release, damages caused by the loss of a valise and contents.
		8,939 39	Release, damages caused by neglecting to appoint an inspector of creosoting.

CANAL.

County.	Area.	Amount.	Remarks.
Stormont	0·34 acres	125 00	
"	5 "	540 00	
"	0·42 "	425 00	

CANAL.

County.	Area.	Amount.	Remarks.
Pontiac		200 00	Release, damages by flooding.
"		180 00	" "
"			
"		50 00	" "

No. 4.—PROPERTY Conveyed and Damages Released to the Department of

4.—CULBUTE

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
14045	Sept. 27, '00	William Flood	No. 2, Range 2.	Litchfield
14046	Oct. 8, '00	B. E. Hennessy.	No. 23, Range 1	Waltham
14047	" 12, '00	J. & T. St. Denis	No. 1, Range 'B'	Mansfield
14048	" 12, '00	D. T. Bertrand, *et al*	No. 7, Range 'A'	"
14093	Jan. 12, '01	John Flood	No. 2, Range 'A'	Waltham
14096	" 16, '01	Joseph Bonin	Nos. 43 and 44, Range 2.	Mansfield
14209	Dec. 24, '85	L. Lacroix, *et al*	No. 12, Con. 'N,' front 'D' and No. 17, Con. 'E,' front 'C'	Westmeath
14210	May 30, '01	John Flood	No. 1 and letter 'B,' Range 'A'	Waltham

5.—GALOPS

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
13922	July 7, '00	W. A. Feader, *et ux*	Pt. E. ½ No. 28	Matilda
13941	Aug. 11, '00	B. Larabee, *et al*	Pt. W. ½ No. 34	"
14024	Oct. 12, '00	Jas. Hodge, *et ux*	Pt. Lot 'M,' N. side of Dundas St.	Village of Cardinal
14070	" 3, '00	H. Redmond, *et ux.*	Pt. W. ½ of No. 28, Con 1	Matilda
14180	May 8, '01	M. Stamp, *et ux*	No. 45, Block 'X'.	Village of Iroquois
14181	" 16, '01	J. D. McLaughlin, *et ux.*	Pt. W. ¼ of No. 11 and pt. E ½ No. 12	Edwardsburg
14191	" 10, '01	G. F. Benson, *et ux*	Pt. No. 1, E. side of Waddell St.	Village of Cardinal.
14193	" 11, '01	G. Serviss, *et al.*	Pt. No. 14, N. side of Dundas St.	"
14255	Nov. 1, '00	William Dillon (executor of Jno. Feeney).	Pt. No. 20, E. side of Waddell St.	"
13950	Aug. 11, '00	H. Serviss	No. 2, N. of Water and W. of John St.	Village of Iroquois
14084	Dec. 25, '00	W. R. Peacock	No. 7, W. of Waller St.	Village of Cardinal
13919	July 10, '00	Hon. G. W. Stephens	Nos. 1703, 1704 and 3413 in parish of Montreal.	
14052	Dec. 17, '00	Alex. Aubertin.	No. 3614 in parish of Montreal	

7.—RAPIDE PLAT

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
13967	Oct. 4, '00	A. & M. G. C. Dill	Pt. Nos. 9 and 10, Range 6th, and pt. Nos. 9, 10, 11 and 12, Range 5th, &c., Mariatown.	Williamsburg
13972	" 4, '00	J. Duvall, *et ux*	Pt. Nos. 7 and 8, Range 6th, Mariatown.	"
13974	" 4, '00	J. H. Meikle, *et al*	Pt. Nos. 5 and 6, Range, 6th Mariatown.	"
14012	" 19, '00	J. D. Anderson, jr., *et al.* (Heirs of M. E. Anderson).	Pt. W½ No. 35, Con. 1	"
14013	" 4, '00	L. Flagg, *et al* (trustees Fairview Cemetery).	" "	"

Railways and Canals during the Fiscal Year ended June 30, 1901—*Continued.*

CANAL—*Continued.*

County.	Area.	Amount.	Remarks.
		$ cts.	
Pontiac................	....	450 00	Release, damages by flooding
"	....	100 00	" "
"	....	20 00	" "
"	....	150 00	" "
"	....	150 00	" "
"	....	75 00	" "
Renfrew................	....	40 00	" " Too late for last year's Report.
Pontiac................	....	325 00	Release, damages by flooding.

CANAL.

County.	Area.	Amount.	Remarks.
Dundas................	3·88 acres........	1,600 00 With interest from Apl. 1, 1898, at 6 per cent........	
"	0·25 "	250 00	
Grenville..............	0.049 "	600 00	
Dundas..............	0·16 "	2,850 00	
"	0·22 "	875 00 With interest at 6 per cent from Apl. 14, 1899....	
Grenville..............	3·25 "	1,000 00	
"	0·029 "	25 00	
"	0·167 "	1,400 00 With interest from Sept. 18, 1899...	
"	0·073 "	115 00	
Dundas................	....	300 00	Release, damages
Grenville..............	....	20 00	Release, damages caused by the retention of possession of house on said lot.
....	....	525 25	Release, damages caused through the deepening of River St. Pierre.
....	....	150 00	Release, damages by flooding.

CANAL.

County.	Area.	Amount.	Remarks.
Dundas	0·81 acres	250 00	
"	0·5 "	185 00	
"	0·5 "	200 00	
"	0·10 "	50 00	
"	0·10 "	275 00	

No. 4.—Property conveyed and damages released to the Department

8.—SOULANGES

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
13920	July 27, '00	Jos. Lecompte	Pt. No. 2A	Coteau Landing Village.
14016	Nov. 14, '00	P. A. Q. V. S. de Beaujeu	Pt. Nos. 6, 7, 10, 11, 13 and 14	St. Ignace du Coteau du Lac.
14069	Dec. 15, '00	Ant. Legros	Pt. No. 15	" "
14158	Mar. 31, '01	H. P. Grange	Pt. No. 1	Coteau Landing Village.
13979	Oct. 29, '00	Honore Leroux		
13980	" 29, '00	A. Leroux		
13981	" 29, '00	E. Leroux		
13982	" 29, '00	X. Beriault		
13983	" 29, '00	I. Bissonnette		
13993	Nov. 15, '00	F. X. St. Merseil		

9.—STE. ANNE'S

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
14124	Feb. 26, '01	H. Pashby		

10.—TRENT

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
14148	Mar. 16, '01	Canadian Bank of Commerce.	Pt. No. 5, Con. 11th	Douro
14190	May 11, '01	J. H. McWilliams	No. 4	Village of Lakefield
14260	June 10, '01	J. Rummerfield		

11.—WELLAND

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
13963	Sept. 27, '01	John Nihan		

Ottawa, September 5, 1901.

of Railways and Canals during the Fiscal Year ended June 30, 1901—*Concluded.*

CANAL.

County.	Area.	Amount.	R marks.
		$ cts.	
Soulanges	91 sq. ft......	125 00	
"	4·69 acres	1,000 00	
"	0·67 "	166 00	
"	....	Pr. 1,500 00 Int. 571 85	
....	....	150 00	Release, damages by flooding.
....	....	120 00	" "
....	....	140 00	" "
....	....	165 00	" "
....	....	165 00	" "
....	....	1,000 00	Release, damages for injuries sustained.

LOCK.

....	....	30 00	Release, damages caused to boat 'Z. B. Danforth.'

CANAL.

Peterborough.........	21·61 acres	1 00	Rectifies an error made in deed No. 13736 Feb. 7, 1900.
"	....	300 00	Release, damages caused by raising high way.
....	....	50 00	Release, damages caused by the loss of a horse whilst crossing bridge at Victoria Road.

CANAL.

....	....	297 00	Release, damages by water to his crops and farm.

GERARD RUEL,
Law Clerk.

PART V

CANAL STATISTICS

CANAL STATISTICS

FOR

SEASON OF NAVIGATION 1900

REVENUE.

The total revenue, exclusive of hydraulic rents for two years, is as follows :—

For 1899	$291,652 37
For 1900	269,116 25

By comparing the statistics of 1899 with 1900, it will be seen that the gross revenue has decreased $22,539.97.

The increases and decreases are as follows :—

	Increase.	Decrease.
On the Welland Canal	....	$ 13,816 33
" St. Lawrence Canals	$ 2,442 64	....
" Chambly Canal	....	1,779 75
" Ottawa Canals	....	9,758 12
" Rideau Canal	388 23	....
" St. Peters Canal	....	95 68
" Trent Valley Canals	....	88 93
" Murray Canal	115 31	....
" Sault Ste. Marie Canal	56 51	....
Total	$ 3,002 69	$ 25,538 81
Total decrease	....	$ 22,536 12

Statement of the Revenue, together with the increases and decreases of all the Canals for the seasons of Navigation from 1899 to 1900, inclusive.

Years.	Revenue.	Increase.	Decrease.
1891	$ 350,351 97	$ 2,292 46	....
1892	358,711 04	8,359 07	....
1893	348,012 00	....	$ 10,699 04
1894	307,824 67	....	40,187 33
1895	283,211 41	....	24,613 26
1896	350,061 03	66,849 62	....
1897	346,758 87	....	3,302 16
1898	341,679 23	....	5,079 64
1899	291,652 37	....	50,026 86
1900	269,116 25	....	22,536 12

In compliance with the renewed request of forwarders and shippers of Montreal and the management of the Canada Atlantic Railway Co., for a reduction of tolls on certain agricultural products, His Excellency the Governor General in Council on February 20, 1900, authorized a reduction of canal tolls, as follows :—

For the season of 1900 the canal tolls for the passage of the following food products, wheat, indian corn, pease, barley, rye, oats, flax-seed and buckwheat for through passage eastward through the Welland Canal, shall be 10 cents per ton, and for through passage eastward through the St. Lawrence Canals, only 10 cents per ton, payment of the said tolls of 10 cents per ton for passage through the Welland Canal to entitle these products to free passage through the St. Lawrence Canals, or any portion thereof; further, in the case of any of the above named products brought down from Parry Sound over the line of the Canada Atlantic Railway Company to their elevator at Coteau Landing, the through rate thereon from that point to Montreal, to be 2½ cents per ton.

In consequence of the reduced rate of tolls, as above, being applicable to the said food products, irrespective of their destination, the reduced rate of 10 and 5 cents a ton respectively only was collected, and therefore no refunds were made on these articles for 1900.

It may be observed, however, that the reduction of tolls from 20 to 10 cents per ton on the articles referred to, for passage through the Welland Canal, amounts to $52,555.20.

The quantity of barley, corn, oats, pease, rye and wheat passed down the Welland Canal, from ports west of Port Colborne for a period of nineteen years is as follows:—

Quantity passed down to Montreal.		Quantity on which full tolls were paid.	
		To ports in Ontario.	Quantity from U.-S. Ports, to U.-S. Ports.
	Tons.	Tons.	Tons.
1882	180,694	....	63,881
1883	186,814	10,650	121,876
1884	142,194	12,153	104,537
1885	96,569	11,909	117,346
1886	203,940	9,881	151,551
1887	185,034	11,838	134,868
1888	160,358	25,599	169,664
1889	267,769	19,075	213,766
1890	288,513	16,899	245,932
1891	295,509	6,805	202,710
1892	261,954	8,942	201,540
1893	501,806	25,555	222,958
1894	273,651	16,699	203,979
1895	* 231,491	32,096	133,823
1896	461,049	73,386	160,372
1897	560,254	53,257	157,756
1898	519,532	31,279	144.612
1899	332,746	40,197	68,011
1900	244,661	17,525	84,589

The tolls on grain for passage through the Welland Canal prior to 1884 were 20 cents a ton; since that date, however, reductions have been made by Orders in Council from year to year as follows:—Upon the urgent request of forwarders and others interested in the grain trade, a reduction was made of one-half the usual rate of tolls on grain passing down the Welland Canal and the St. Lawrence Canals to Montreal; and in 1885 tolls were reduced to 2 cents a ton, and thereafter from year to year, including 1891.

In 1892 the tolls were reduced to 2 cents a ton on grain passed down the Welland and St. Lawrence Canals and exported, and in such cases only.

In 1893 by Order in Council of February 13, the tolls were reduced to 10 cents a ton on grain passing eastward through the Welland Canal, irrespective of its destination, and the same rate of tolls for 1894 were allowed by O.C., April 16, 1894.

For the year 1895 (O.C., April 1, 1895,) the same rate of tolls was allowed as was granted for the year 1894.

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* Of the quantity of grain passed down to Montreal there were transhipped at Ogdensburg in 1891, 17,817 tons; in 1892, 4,341 tons; in 1893, 71,445 tons; in 1894, 23,030 tons; in 1895, 18,987 tons; in 1896, 77,355 tons; in 1897, 89,659 tons; in 1898, 40,257, tons in 1899, 48.828 tons, and in 1900, 38,403 tons.

For the year 1896 (O.C., April 23, 1896,) the same rate of tolls was allowed as was granted for the year 1895.

For the year 1897 (O.C., April 17, 1897,) the same rate of tolls was allowed as was granted for the year 1896.

For the year 1898 (O.C., June 1, 1898,) the same rate of tolls was allowed as was granted for the year 1897.

For the year 1899 (O.C., April 10, 1899), the same rate of tolls was allowed as was granted for the year 1898.

For the year 1900 (O.C., February 20, 1900,) the same rate of tolls was allowed as was granted for the year 1899.

The rate through the St. Lawrence Canals only, was 10 cents a ton.

It may be remarked that goods having paid full tolls on the Welland Canal are allowed to pass down the St. Lawrence Canals to Montreal free from payment of any further tolls.

During the last decade the quantity of agricultural products as above, passed down the Welland and St. Lawrence Canals to Montreal, has decreased from 295,509 tons in 1891 to 244,661 tons in 1900; and the quantity passed down the Welland Canal from United States ports to United States, has decreased from 202,710 to 84,589 tons for the same years.

The quantity of barley, buckwheat, corn, oats, pease, rye and wheat, arrived at Montreal via Grand Trunk and Canadian Pacific Railways for a period of 13 years, is reported as follows:—

	Tons.
For 1888	113,794
1889	94,943
1890	119,208
1891	184,410
1892	291,680
1893	147,610
1894	60,666
1895	51,114
1896	153,717
1897	228,611
1898	293,391
1899	209,170
1900	229,624

The quantity of the same articles passed down the whole length of the St. Lawrence Canals to Montreal, for the same period was:—

	Tons.
For 1888	166,191
1889	275,414
1890	242,571
1891	320,434
1892	302,899
1893	532,084
1894	288,015
1895	247,550
1896	495,898
1897	604,200
1898	575,097
1899	372,291
1900	295,928

Comparative shipments of grain by the St. Lawrence route, and rail and water via the state of New York, are as follows :—

QUANTITY OF GRAIN TO SEA-BOARD BY COMPETING ROUTES.

The quantity of grain and pease passed down the whole length of the St. Lawrence Canals to Montreal, is as follows :—

	Tons.
For 1899	372,291
1900	295,928
Showing a decrease of	76,363

The quantity of grain and pease carried to Montreal via Canadian Pacific and Grand Trunk Railways, is reported as follows :—

	Tons.
For 1899	209,170
1900	229,624
Showing an increase of	20,454

The quantity of grain arrived at tide-water by New York Canals, is reported as follows :—

	Tons.
For 1899	416,700
1900	308,945
Showing a decrease of	107,755

The quantity of grain carried to tide-water by the New York railways, is reported as follows :—

	Tons.
For 1899	4,642,952
1900	4,396,441
Showing a decrease of	246,511

The increases and decreases for 1900 as compared with 1899 on the several routes, competing for the carrying trade to the seaboard, are as follows :—

——	Increase.	Decrease.	Increase. per cent.	Decrease.
On the St. Lawrence Canals	....	76,363	....	22·43
do Canadian Pacific and Grand Trunk Railway	20,454	....	9·8	....
do New York Canals	....	107,795	....	34·89
do do Railways	....	246,511	....	5·61

By reference to Appendix U, it will be seen that the quantity of freight from ports west of Port Colborne to the United States ports, Oswego, Ogdensburg, &c., has decreased from 313,574 tons in 1889 to 177,876 tons in 1900, and the quantity to Ontario ports, between Port Dalhousie and Cornwall, and decreased from 130,584 tons in 1889 to 113,205 tons in 1900. The quantity passed down to Montreal shows a decrease from 292,827 tons in 1889 to 288,231 tons in 1900.

TRANSHIPMENT OF GRAIN.

The quantity of grain passed down the Welland Canal in Canadian and United States vessels to Kingston and Prescott for fifteen years, is as follows :—

In Canadian vessels there were in—

			Tons.
1886,	244	Cargoes, with an aggregate quantity of........	143,330
1887,	284	do do	178,233
1888,	182	do do	143,025
1889,	208	do do	165,117
1890,	203	do do	184,275
1891,	209	do do	190,664
1892,	158	do do	159,018
1893,	146	do do	148,962
1894,	125	do do	159,145
1895,	123	do do	136,617
1896,	196	do do	227,912
1897,	180	do do	229,265
1898,	166	do do	224,021
1899,	162	do do	221,306
1900,	325	do do	183,200

In United States vessels there were in—

			Tons.
1886,	97	Cargoes, with an aggregate quantity of........	62,222
1887,	19	do do	12,477
1888,	60	do do	43,667
1889,	114	do do	108,358
1890,	35	do do	35,560
1891,	77	do do	90,153
1892,	89	do do	109,812
1893,	257	do do	328,269
1894,	84	do do	106,236
1895,	56	do do	73,987
1896,	158	do do	217,978
1897,	197	do do	285,847
1898,	339	do do	464,852
1899,	167	do do	205,571
1900,	259	do do	163,575

Fifteen vessels took cargoes af 7,924 tons through to Montreal intact in 1900, 2 of 558 tons in 1899, seven of 2,426 in 1898, seven of 2,324 in 1897, three of 1,176 in 1896, four of 1,344 tons in 1895, two cargoes of 810 tons in 1894, none in 1893, two in 1892, of 924 tons, and three in 1891 of 1,441 tons. Nine vessels lightened a portion of their cargoes in 1900, 11 in 1899, 25 in 1898, 11 in 1897, 16 in 1896, 6 in 1895, 19 in 1894, 34 in 1893, 25 in 1892, and 44 in 1891 ; 473 vessels discharged the whole of their cargoes at Kingston in 1898, 359 in 1897, 335 in 1896, 169 in 1895, 188 in 1894, 369 in 1893, 220 in 1892, and 293 in 1891.

The quantity of grain transhipped at Port Colborne in 1900 and the four previous years is given below.

The total number of grain laden vessels lightened at this port in 1900 was 68, against 86 the previous year.

The quantity of grain lightened was as follows :—

Articles.	1896.	1897.	1898.	1899.	1900.
	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat	660,190	642,927	239,518	390,162	272,609
Corn	908,833	697,508	313,689	638,143	448,256
Rye	8,197	Nil	37,380	7,065	Nil
Oats	79,585	12,527	Nil	Nil	Nil
Barley	6,377	5,119	5,669	Nil	Nil

WELLAND CANAL.

The total quantity of freight passed on the Welland Canal during the season of 1900 was 719,360 tons; of this quantity 30,803 tons were way or local freight.

There were 601,130 tons of freight passed eastwards, and 118,230 tons passed westwards.

East and west bound through freight.

The total quantity of through freight passed through the whole length of the Welland Canal during the season of 1900 was 688,557 tons.

Of this quantity 579.312 tons were east bound and 109,245 west bound freight.

Of the east bound through freight Canadian vessels carried 307,373 tons and United States vessels carried 271,939 tons ; and of the west bound through freight Canadian vessels carried 12,124 tons, and United States vessels carried 97,121 tons, or a total of 319,497 tons for Canadian and 369,060 tons for American vessels.

ST. LAWRENCE CANALS.

The total quantity of freight passed through these canals during 1900 was 1,309,066 tons, of this quantity 1,115,171 tons passed eastward and 193,895 past westward.

East and west bound through freight.

The total quantity of through freight was 667,584 tons ; of this quantity 637,605 tons were east bound and 29,979 tons were west bound.

Way freight.

Of the total quantity of (way) or local freight 477,566 tons were east bound and 163,916 tons west bound freight.

THROUGH TRAFFIC BETWEEN MONTREAL AND PORTS ON LAKE ERIE, MICHIGAN, ETC.

The total quantity of through freights passed eastward and westward through the Welland and St. Lawrence Canals, from Lake Erie to Montreal, during fifteen years, is as follows :—

	Eastward to Montreal. Tons.	Westward from Montreal. Tons.
1886	244,514	16,801
1887	213,834	14,075
1888	183,899	19,310
1889	298,197	25,370
1890	231,746	13,951
1891	309,593	14,060
1892	263,144	9,452
1893	508,016	16,545
1894	292 191	9,439
1895	266,659	10,555
1896	480,077	10,050
1897	584,246	4,542
1898	538,108	4,436
1899	354,933	5,991
1900	288,251	6,217

FREIGHT FROM UNITED STATES PORTS TO UNITED STATES PORTS.

The total quantity of freight passed eastward and westward through the Welland Canal, from United States ports to United States ports, for a period fifteen years, is as follows :—

	Eastward. Tons.	Westward. Tons.	Total. Tons.
1886	224,916	239,562	464,478
1887	189,427	151,074	340,501
1888	221,062	213,689	434,751
1889	297,353	266,231	563,584
1890	318,259	215,698	533,957
1891	306,257	247,543	553,800
1892	300,733	240,332	541,065
1893	384,559	247,108	631,667
1894	361,319	230,948	592,267
1895	255,259	214,520	469,779
1896	385,695	267,518	653,213
1897	353,863	210,831	564,694
1898	277,023	210,516	487,539
1899	225,491	135,038	360,529
1900	99,560	218,969	318,529

The total quantity of freight passed through the Welland Canal from United States ports to United States ports shows a decrease of 42,000 tons, as compared with the previous year; and a decrease of 145,949 tons, as compared with 1886.

The following statement shows the aggregate number of vessels, and the total quantity of freight passed through the Welland Canal, and the quantity passed between United States ports during the years 1867 to 1900, inclusive :

Fiscal year.	Aggregate number of vessels.	Total quantity transported on the Welland canal.	Quantity passed from United States ports to United States ports.
	No.	Tons.	Tons.
1867	5,405	983,260	458,396
1868	6,157	1,161,821	641,711
1869	6,069	1,231,903	688,700
1870	7,356	1,311,956	747,567
1871	7,729	1,478,122	772,756
Season of navigation.			
1872	6,063	1,333,104	606,627
1873	6,425	1,506,484	656,208
1874	5,814	1,389,173	748,557
1875	4,242	1,038,050	477,809
1876	4,789	1,099,810	488,815
1877	5,129	1,175,398	493,841
1878	4,429	968,758	373,738
1879	3,960	865,664	284,043
1880	4,104	819,934	179,605
1881	3,332	686,506	194,173
1882	3,334	790,643	282,806
1883	3,267	1,005,156	432,611
1884	3,138	837,811	407,079
1885	2,738	784,928	384,509
1886	3,589	980,135	464,478
1887	2,785	777,918	340,501
1888	2,647	878,800	434,753
1889	2,975	1,085,273	563,584
1890	2,883	1,016,165	533,957
1891	2,594	975,013	553,800
1892	2,615	955,554	541,065
1893	2,843	1,294,823	631,667
1894	2,412*	1,008,221	592,267
1895	2,222	869,595	469,779
1896	2,766	1,279,987	653,213
1897	2,725	1,274,292	564,694
1898	2,384	1,140,077	487,539
1899	2,202	789,770	360,529
1900	2,399	719,360	318,529

The total quantity of freight passed through the several divisions of the canals during the season of 1900 is as follows :—

——	Farm Stock.	Forest Produce of Wood.	Manufactures.	Merchandise.	Agricultural Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland	60	115,217	59,691	164,734	379,658	719,360
St. Lawrence	990	95,518	74,739	437,423	693,734	1,309,066
Chambly	267	205,160	9,832	109,039	24,263	348,561
Ottawa	991	378,801	836	2,928	5,589	389,145
Rideau	11	37,925	4,900	28,887	3,709	75,432
St. Peters	77	17,524	3,835	42,548	9,829	73,813
Murray	33	4,496	2,447	8,811	3,280	19,067
Trent Valley	209	42,292	133	311	627	43,572
Sault Ste. Marie	220	37,008	27,743	1,588,456	382,250	2,035,667

The total quantity of freight moved on the Welland Canal was 719,360 tons, of which 379,658 tons were agricultural products.

On the St, Lawrence Canals the total quantity of freight moved was 1,309,066 tons, of which 693,834 were agricultural products, and 437,423 tons were merchandise.

On the Ottawa Canals the total quantity of freight moved was 389,145 tons, of this quantity 378,801 tons were the produce of the forest.

STATISTICAL COMPARISON OF VARIOUS UNITED STATES ROUTES.

The statistical comparisons heretofore given in respect to the quantities of the principal articles carried through the Welland Canal, and those carried over routes in the United States, in competition with that work, have been continued to date.

By reference to statement H, as to the quantity of vegetable food carried to tidewater, it will be observed that the quantity carried by the New York Canada was 472,857 tons in 1900, 577,486 in 1899, 653,027 in 1898, 744,575 in 1897, 957,182 in 1896, 606,505 in 1895, 1,400,129 in 1894, 1,450,116 in 1893, 937,999 in 1892, and 1,092,385 in 1891.

The quantities of vegetable food carried by the New York Central, Erie and New York, West Shore and Buffalo Railways being :—

	Tons.		Tons.
In 1900	6,053,005	In 1887	*3,847,766
1899	6,211,827	1886	*3,802,262
1898	7,060,542	1885	4,105,594
1897	5,673,638	1884	3,639,805
1896	5,183,540	1883	4,422,461
1895	3,798,574	1882	3,885,557
1894	4,281,056	1880	4,732,385
1893 *	5,107,426	1869	1,087,809
1892	5,913,013		
1891	3,565,381		
1890	4,336,199		
1889	3,654,984		
1888	3,197,734		

* Flour and grain only.

The following figures are an abstract of the quantities of vegetable food carried to tide-water by the canals and railways of the state of New York during thirty-two years :—

——	Canals.	Railways.	Total.	Proportions by canals.
	Tons.	Tons.	Tons.	Tons.
1869	1,302,613	1,087,809	2,390,342	·545
1870	1,295,010	1,766,457	3,061,467	·423
1871	1,850,198	2,205,589	4,055,787	·456
1872	1,674,320	1,870,614	3,544,934	·472
1873	1,745,171	2,036,992	3,782,163	·461
1874	1,767,598	2,791,517	4,559,115	·387
1875	1,305,550	2,343,241	3,648,791	·357
1876	1,064,293	2,875,803	3,940,096	·270
1877	1,498,984	2,493,683	3,992,667	·375
1878	1,912,734	3,695,764	5,608,498	·341
1879	1,833,399	4,353,617	6,187,016	·296
1880	2,371,090	4,732,385	7,103,475	·333
1881	1,116,561	4,983,722	6,100,283	·183
1882	1,118,776	3,885,557	5,004,333	·223
1883	1,379,000	4,422,461	5,801,461	·237
1884	1,236,986	3,639,805	4,876,791	·253
1885	1,063,310	4,105,594	5,168,904	·205
1886	1,489,886	3,802,262	5,292,148	·281
1887	1,539,403	3,847,766	5,387,169	·285
1888	1,166,958	3,197,734	4,364,692	·267
1889	1,296,896	3,654,984	4,951,880	·262
1890	1,167,901	4,336,199	5,504,100	·212
1891	1,092,355	3,565,381	4,657,736	·234
1892	937,999	5,913,013	6,851,012	·137
1893	1,452,563	5,107,426	6,599,989	·284
1894	1,400,129	4,281,056	5,681,185	·327
1895	602,505	3,798,574	4,401,079	·159
1896	957,182	5,183,540	6,140,722	·156
1897	744,575	5,673,638	6,418,213	·116
1898	653,027	7,060,542	7,713,569	·085
1899	577,486	6,211,827	6,789,313	·086
1900	472,857	6,053,005	6,525,862	.073

COMPARATIVE STATEMENT OF TRAFFIC BY RAILWAYS AND CANALS VIA THE STATE OF NEW YORK.

On reference to the returns made by the railways to the state authorities of New York, and to the canal statistics submitted to the state legislature, I find that of the total tonnage of freight carried by the canals and railways, the state canals carried :—

	Per cent.		Per cent.
In 1859	68·9	In 1885	17·1
1869	47·0	1886	16·9
1879	38·9	1887	16·3
1871	38·9	1888	18·8
1872	40·1	1889	15·1
1873	34·9	1890	13·9
1874	31·7	1891	13·4
1875	28·4	1892	9·8
1876	24·6	1893	10·1
1877	28·3	1894	10·2
1878	27·1	1895	9·7
1879	23·7	1896	8·5
1880	25·1	1897	8·3
1881	18·5	1898	6·9
1882	19·0	1899	7·2
1883	18·7	1900	5·2
1884	19·0		

The quantity of freight carried by the canals and railways was greater in 1900 by 13,730,780 tons than the quantity carried in 1899, and an increase of 52,980,367 tons over 1869.

The quantities carried were as follows:—

	Total Tonnage.	Proportion by canals.
In 1859	5,485,076	·6890
1869	12,453,174	·4705
1870	15,148,274	·3895
1871	15,844,152	·3896
1872	16,631,609	·4012
1873	18,200,208	·3497
1874	18,283,547	·3174
1875	17,101,758	·2841
1876	16,948,627	·2462
1877	17,489,770	·2833
1878	19,017,301	·2719
1879	22,590,766	·2373
1880	25,706,586	·2512
1881	27,857,394	·1859
1882	28,693,054	·1905
1883	30,167,119	·1877
1884	26,293,844	·1905
1885	27,543,948	·1718
1886	31,168,744	·1698
1887	34,029,791	·1632
1888	26,244,610	·1883
1889	35,466,042	·1514
1890	37,624,199	·1394
1891	38,524,179	·1343
1892	43,618,569	·0982
1893	42,953,233	·1009
1894	37,916,412	·1024
1895	36,170,339	·0967
1896	43,756,051	·0849
1897	43,711.512	·0828
1898	49,311,030	·0682
1899	51,702,761	·0713
1900	65,433,541	·0512

Average freight rates, grain, Chicago to Buffalo:—(as reported by the Secretary Merchants' Exchange, Buffalo).

Year.	Wheat.	Year	Wheat.
1880.	5·7	1892.	2·2
1881.	3·2	1893.	1·6
1882.	2·5	1894.	1·2
1883.	3·5	1895.	1·9
1884.	2·1	1896.	1·7
1885.	2·0	1897.	1·5
1886.	3·6	1898.	1·5
1887.	4·1	1899.	2·5
1888.	2·7	1900.	1·8
1889.	2·5		
1890.	1·9	Average twenty years	2·5
1891.	2·5		

COMPARATIVE STATEMENT of the Commerce through the United States, St. Mary's Falls Canal and Canadian Sault Ste. Marie Canal, for the Seasons, of 1899 and 1900.

		Traffic for 1900.		Total Traffic for		Increase.	Decrease.
		United States Canal.	Canadian Canal.	Season of 1900.	Season of 1899.	Amount.	Amount.
Vessels	Number.	16,369	3,081	19,450	20,249	....	799
Lockages	"	8,479	2,205	10,684	10,999	....	315
Tonnage registered	Net tons.	20,136,782	2,194,748	22,331,530	21,969,498	....	637,968
" freight	"	23,607,354	2,035,677	25,643,031	25,258,803	385,228	....
Passengers	Number.	36,313	22,280	58,593	49,361	9,232	....
Coal (hard)	Net tons.	476,131	36,444	512,575	842,481	....	329,906
" (soft)	"	3,488,558	493,854	3,982,412	3,097,252	885,160	....
Flour	Barrels.	6,123,458	647,944	6,771,402	7,191,681	....	420,289
Wheat	Bushels.	31,325,693	9,291,114	40,616,807	58,301,682	....	17,684,875
Grain (excluding wheat)	"	15,068,245	1,113,414	16,181,659	30,079,806	....	13,898,147
Manufactured and pig iron	Net tons.	117,086	23,575	140,661	217,556	....	76,895
Salt	Barrels.	318,358	12,600	330,958	319,306	11,652	....
Copper	Net tons.	126,671	5,435	132,106	120,746	11,360	....
Iron ore	"	15,439,617	999,591	16,439,208	15,333,289	1,105,919	....
Lumber	ft. B.M.	898,093,000	7,435,806	905,528,806	1,032,602,000	....	127,073,194
Silver ore	Net tons.	110	....	110	487	....	377
Building stone	"	43,912	3,476	47,388	40,132	7,256	....
*Unclassified freight	"	460,760	80,512	541,272	590,658	....	49,386

* Included in unclassified freight for

	1899.	
Wool	228	Tons.

The United States canal was open to navigation during the season of—

1889	234 days.
1890	228 〃
1891	225 〃
1892	233 〃
1893	219 〃
1894	234 〃
1895	231 〃
1896	232 〃
1897	234 〃
1898	241 〃
1899	231 〃
1900	238 〃

The Canadian canal was open to navigation during the season of—

1895	87 days.
1896	218 〃
1897	238 〃
1898	243 〃
1899	239 〃
1900	238 〃

The average number of vessels passing per day through the two canals for the season of 1900 was eighty-two.

R. DEVLIN,
Compiler of Canal Statistics.

OTTAWA.

GRAIN SHIPMENTS, 1900.

Coastwise, in transit through Canada and export by Lake.

(From Report Board of Trade, Chicago.)

Grain.	Depot Harbour.	Goderich	Kingston.	Midland.	Owen Sound.	Prescott	Sarnia.	Totals.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Barley	16,562	....	....	....	....	43,600	....	60,162
Corn	6,531,632	183,843	2,032,589	2,144,972	78,144	210,610	40,000	11,221,790
Flaxseed	143,932	....	....	....	....	....	....	143,932
Oats	991,119	....	54,812	227,285	....	....	2,501,536	3,774,752
Rye	180,485	....	21,304	....	....	....	....	201,789
Wheat	3,170,232	419,600	526,516	1,874,900	....	152,934	....	6,144,182
Totals	11,033,962	603,443	2,635,221	4,247,157	78,144	407,144	2,541,536	21,546,607

Exports by Lake from Chicago to Canada, during the Season of Navigation in 1900.

(From Report of Board of Trade, Chicago.)

Commodities.		Quantity.	Value.	
			$	cts.
Corn	Bush.	506,660	3,478,292	00
Barley	"	60,162	24,989	00
Flaxseed	"	135,532	223,676	00
Oats	"	1,024,216	261,161	00
Rye	"	201,789	114,471	00
Wheat	"	4,928,832	3,553,052	00
Flour	Barrels.	20,860	80,757	00
Starch	"	4,075	19,052	00
Pork	"	3,175	38,285	00
Lard	"	8,000	191,800	00
Tallow	"	1,726	31,967	00
Nails	Kegs.	7,040	33,825	00
Machinery	Tons.	121	58,761	00
Steel Rails	"	8,837	214,143	00
Lumber	ft. B.M.	569	12,821	00
Glucose	Barrels.	100	908	00
Oils	"	12,775	29,893	00
Oil Cake	Sacks.	884	1,250	00
Unclassified	Packages.	3,135	13,353	00
Total value			8,382,456	00

GRAIN FREIGHTS BY LAKE, SEASON OF 1900.

The following were the current rates on Wheat and Corn, from Chicago to Kingston, Prescott and Depot Harbour ; also from Buffalo to New York by Erie Canal, for each week during the Season of Navigation.

1900.	To Ogdensburg.		To Kingston.		To Prescott.		To Depot Harbour.		Erie Canal, Buffalo to New York.	
	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.
	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.
April 21		4¼				4				
" 28				3¾			2¼	2	2⅛	2¼
May 4		4⅜					2	1¾	2½	2¼
" 11		3¾					2	1¾	2⅜	2¼
" 18		3½					1⅝	1½	2⅝	2¼
" 25		2⅞					1⅜	1¼	2¼	2
June 2							1½	1⅜	2¼	2
" 9							1⅞	1⅜	2¼	2
" 16							1⅞	1¾	2¼	2
" 23							1⅞	1⅜	2¼	2
" 30							1⅞	1⅜	2¼	2
July 7							1⅝	1¾	2¼	2
" 14							1⅞	1½	2¼	2
" 21							1⅞	1¼	2½	2¼
" 28			3⅜				1⅞	1¾	2⅜	2¼
Aug. 4							1⅞	1¾	2⅜	2⅛
" 11	3⅛		3⅛ to 3¼				1½	1½	2⅜	2⅛
" 18	2¾						1⅜	1¼	2¼	2
" 25	2¾	2⅝					1⅛	1	2¼	2
Sept. 1	2¾						1⅛	1	2¼	2
" 8	2¾						1⅜	1¼	2¼	2
" 15		2¾					1¼	1⅜	2¼	2
" 22							1⅝	1½	2¼	2
" 29							1⅝	1½	2¼	2¼
Oct. 6							1⅝	1½	2½	2½
" 13							1½	1⅜	2⅓	2½
" 20							1⅝	1½	2⅓	2½
" 27			2⅝	2⅝			1⅜	1¼	2¾	2½
Nov. 3						2⅞	1⅜	1¼	3¾	3⅛
" 10							1¼	1¼	3¾	3⅛
" 17							1⅓	1⅜	3½	3
" 24						2⅞	2	1⅞	3⅓	3
Dec. 1							2¾	2⅝	3⅓	3
" 8							3	2¾		

LAKE FREIGHTS FROM CHICAGO TO BUFFALO ON WHEAT AND CORN.

Statement showing the dates of the changes of the ruling rates of Lake freights on Wheat and Corn from Chicago to Buffalo, during 1900 (as reported by the Secretary of the Merchants' Exchange, Buffalo).

1900.	Wheat, Bushels.	Corn, Bushels.
Opening.	Cts.	Cts.
March 29	....	3
April 4	....	2⅞
" 7	....	2⅞ to 3
" 14	....	2⅞
" 20	....	2½
" 21	2½	2¼
" 23	....	2½
" 28	....	2¼
" 30	2¼	2⅛
May 2	2⅛	2
" 3	....	2 to 2⅛
" 4	2⅛	2 to 2⅛
" 5	....	2
" 11	....	1⅞ to 2
" 12	....	1¾
" 15	1⅞	1¾
" 19	....	1½
" 21	1½	1⅝
" 22	....	1¼
" 23	1⅜	1¼
" 24	1½	1⅜
" 26	....	1¼
" 28	....	1¼ to 1⅜
" 29	1⅜	1¼
" 31	1⅜	1¼ to 1⅜
June 1	1½	1¼ to 1⅜
" 3	....	1½
" 6	....	1½
" 7	....	1¾ to 2
" 8	....	2
July 3	2⅛	2
Aug. 7	....	1¾
" 8	1¾	1¾
" 10	1⅝	1¾
" 11	1¾	1¾
" 13	1⅝	1½ to 1⅝
" 14	....	1½
" 15	1½	1½
" 18	1⅜	1¼
" 20	1¼	1¼
" 23	1¼	1⅛
Aug. 29	1¾	1¼
" 30	1¼ to 1¾	1⅛ to 1¼
" 31	1⅝	1⅛ to 1¼
Sept. 1	1⅝	1¼
" 4	1½	1⅜
" 6	....	1⅜ to 1½
" 7	1¾	1½ to 1⅝
" 8	1⅞	1⅝ to 1¾
" 10	2	2
" 11	2	1⅞ to 2
" 12	2	1⅞
" 20	1⅞ to 2	1¾
" 21	1¾	1⅝ to 1¾
" 22	1⅝ to ¾	1⅝
" 24	1⅝	1½
" 25	1¾	1⅝
" 26	1⅞	1¾
Oct. 8	....	1⅝
" 9	1¾	1⅝
" 16	1⅝	1½ to 1⅝
" 17	1⅝ to 1¾	1½ to 1⅝
" 18	1⅝	1½
" 26	1½	1½
" 29	....	1⅜
Nov. 1	....	1⅜
" 2	1½	1⅜
" 9	1⅝	1⅜
" 12	1⅝ to 1¾	1⅝ to 1¾
" 13	2	1¾ to 1⅞
" 14	1⅞ to 2	1¾ to 1⅞
" 15	1⅞	1¾
" 16	1⅞ to 2	1¾ to 1⅞
" 17	1⅞	1¾
" 19	1⅞ to 2	1¾ to 1⅞
" 20	2	1¾ to 1⅞
" 21	2½	2 to 2¼
" 22	....	2¼
" 27	3	2¾
Dec. 1	....	3
" 3 to close	3¼	3

Rates from Milwaukee, about the same, as from Chicago.

AVERAGE LAKE FREIGHTS.

The following statement shows the average rates of lake freights on wheat and corn between Chicago and Buffalo during each month in the past ten years, the highest and lowest rate on wheat in each year, and the average rate on wheat each year in cents, per bushel :—

(*Per Report of the Secretary of Merchants' Exchange, Buffalo.*)

Grain, bushel.		May. — Cents.	June. — Cents.	July. — Cents.	Aug. — Cents.	Sept. — Cents.	Oct. — Cents.	Nov. — Cents.
1891	Wheat	1·4	1·2	2·1	2·7	3·3	2·2	4·1
	Corn	1·2	1·1	2·0	2·5	3·0	2·1	3·8
Highest rate, wheat, 1891, 5¼c. ; lowest, 1c. ; average for the season, 2·4c.								
1892	Wheat	1·9	1·8	2·0	2·3	2·3	2·3	2·6
	Corn	1·7	1·6	1·8	2·1	2·1	2·1	2·3
Highest rate, wheat, 1892, 3c. ; lowest, 1c. ; average for the season, 2·2c.								
1893	Wheat	1·3	1·8	1·2	1·3	1·7	2·1	2·0
	Corn	1·2	1·6	1·1	1·2	1·5	1·9	1·8
Highest rate, wheat, 1893, 2¾c. ; lowest, 1c. ; average for the season, 1·6c.								
1894	Wheat	1·4	1·2	0·9	1·0	1·4	1·1	1·3
	Corn	1·2	1·1	0·9	0·9	1·3	1·0	1·3
Highest rate, wheat, 1894, 3c. ; lowest, ⅞c. ; average for the season, 1·2c.								
1895	Wheat	1·2	1·2	1·1	1·6	2·1	3·0	3·0
	Corn	1·1	1·1	1·0	1·4	1·9	2·9	2·7
Highest rate, wheat, 1895, 3c. ; lowest, 1c. ; average for the season, 1·9c.								
1896	Wheat	1·6	1·5	1·2	1·3	1·4	2·0	2·1
	Corn	1·4	1·3	1·1	1·2	1·2	1·9	1·9
Highest rate, wheat, 1896, 2⅝c. ; lowest, 1¼c. ; average for the season, 1·7c.								
1897	Wheat	1·3	1·2	1·3	1·5	2·0	1·8	1·5
	Corn	1·2	1·1	1·2	1·4	1·8	1·7	1·4
Highest rate, wheat, 1897, 2⅝c. ; lowest, 1c. ; average for the season, 1·5c.								
1898	Wheat	1·3	0·1	0·9	1·2	1·4	2·5	2·3
	Corn	1·2	0·8	0·8	1·1	1·3	2·3	2·1
Highest rate, wheat, 1898, 3¼c. ; lowest, 1¼c. ; average for the season, 1·5c.								
1899	Wheat	2·0	2·0	2·2	2·5	3·1	3.5	2·5
	Corn	1·8	1·9	2·0	2·3	3·2	3·4	2·3
Highest rate, wheat, 1899, 3¾c. ; lowest, 1⅞c. ; average for the season, 2·5c.								
1900	Wheat	1·8	1·9	2·1	1·6	1·7	1·7	2·0
	Corn	1·6	1·7	2·0	1·5	1·6	1·5	1·8
Highest rate, wheat, 1900, 3c. ; lowest, 1¼ ; average for the season, 1·8c.								

LAKE FREIGHTS FROM DULUTH TO BUFFALO ON WHEAT (AS REPORTED BY THE SEC. OF THE MERCHANTS EXCHANGE, BUFFALO, N.Y.).

The following statement shows the Lake Freight rates on Wheat from Duluth to Buffalo, during the season of 1900:—

1900.	Wheat Bushels.	1900.	Wheat Bushels.
	Cts.		Cts.
April 23	3¾	July 16	2⅛
" 25	3½	" 18	2
" 27	3¼	" 28	1¾
May 5	3	Aug. 3	1½
" 9	2¾	" 27	1¾
" 11	2½	Sept. 5	1⅝
" 23	2⅛	" 7	2
" 25	2	" 13	1¾
" 29	2¼	" 14	1½
" 31	2⅜	" 26	1¾
June 6	2½	Oct. 15	1⅝
" 9	2¾	" 17	1½
" 14	2½	Nov. 13	1¾
" 18	2¼	" 16	2
" 29	2¾	" 24	2½
July 9	2½	" 26	2¾
" 13	2⅜	" 27	3
" 14	2¼	" 28 to end of season	3¼

In 1885, the range of freights on wheat, Duluth to Buffalo, was 1½ to 5c.; in 1886, 3¼ to 8c.; in 1887, 5 to 8c.; in 1888, 2 to 5c.; in 1889, 2 to 5c.; in 1890, 2 to 5c.; in 1891, 1¼ to 9½c.; in 1892, 2¼ to 4c.; in 1893, 1¼ to 3½c.; in 1894, 1¼ to 3c.; in 1895, 2 to 6c.; in 1896, 1¼ to 3c.; in 1897, 1 to 2½c.; in 1898, 1 to 3½c.; in 1899, 2½ to 6c.; and in 1900, 1½ to 3¾c. per bushel.

The first departure by lake, at Duluth, in 1900, was on April 22; in 1899, on April 29; in 1898, was on April 16; in 1896, on April 22, and in 1895, on April 21. In 1894, season opened on April 19; in 1893, on May 8; in 1892, on April 21; in 1891, on April 30; in 1890, on March 26; in 1889, on April 20; in 1888, on May 12; in 1887, on May 4; in 1886, on May 7.

Wheat was shipped at Kingston, Canada, per bushel, during the season of 1887, at 6¼ to 7¾c.; in 1888, at 4 to 5c.; in 1889, at —, in 1890, 5¾, 5½, 4½, 4¼, 4c.; in 1891, during May, 3¾, 3½, 2½c.; during June, 3c.; and on July 25, 2½c.; in 1892, 5c. in April; 5 to 5¼c. in May; 4c. in June, 4½c. in July; 3c. in August; 6 to 6¼c. in October; in 1893, ranged from 5½ to 4½c. in April; 4½ to 4¾c. in May; 4 to 3½c. in June; 2¾ to 3c. in July; 3½ to 3¾c. in September; no figures quoted after that date. In 1894, ranged from 3¼ to 3½c. in May; 3½c. in June; 2½c. in July; 2½c. to 3¼c. in August; 4c. in September, and 4¼c. in October. On August 25 and November 3, 1894, wheat to Ogdensburg, at 3¼c. and 4½c. respectively. In 1895, wheat to Kingston from 3c. to 5c. In 1896, wheat to Kingston from 3c. to 5½c.; and in 1897, wheat to Kingston 3c. to 3⅛c, according to time of year; 1898 and 1899 not given.

LAKE FREIGHTS FROM TOLEDO TO BUFFALO ON WHEAT.

The following statement shows the ruling rates of Lake Freights, on wheat from Toledo to Buffalo, during the season of 1900 on the dates specified, as reported by the Secretary Merchants Exchange Buffalo.

Date, 1900.	Wheat and Corn per Bushels.	Date, 1900.	Wheat Bushels.
	Cts.		Cts.
Opening to August 1..................	1¼	August 1 to close of season...........	2

The range for 1886 was 1¾ to 3c.; for 1887, 2¼ to 3c.; for 1888, 1½ to 2⅛c.; for 1889, 1¾ to 2c.; for 1890, 1½ to 2c.; for 1891, 1 to 3c.; for 1892, 1½ to 2½c.; for 1893, 1 to 2c.; for 1894, 1 to 2c.; for 1895, 1 to 2¼c.; for 1896, 1¼ to 1¾c.; for 1897, 1 to 1¼c., and for 1898, 1 to 1½c.; for 1899, 1½ to 2c., and for 1900, 1½ to 2c. per bushel.

From Toledo to Ogdensburg, wheat and corn shipped, at 6 to 7c. in 1887; at 4½ to 6c. for wheat and 5c. for corn in 1888; and 5c. to 5⅞c. for wheat in 1889 per bushel. From Toledo, on October 8, 1887, corn shipped to Kingston at 3½c. and on November 12, at 4½c. per bushel. In 1888, corn Toledo to Kingston, 4¼c. to 3c.; and wheat at 3½ to 3c. per bushel. In 1889, wheat Toledo to Kingston, 3c.; and in 1891, rye Toledo to Kingston at 3c. per bushel. From Toledo, on June 2, 1887, wheat shipped to Montreal by propeller at 6½c.; on June 14, corn at same price; but on September 26, the rate on corn was only 5c. per bushel. In 1888, corn Toledo to Montreal, at 6 to 5¾c. and wheat at 5½c. per bushel. From 1889 to 1899, no shipments to Montreal or other places in Canada reported.

CANAL FREIGHT FROM BUFFALO TO NEW YORK.

The following shows the changes in the ruling rates of freight to New York from Buffalo, on the days specified in 1900 (as reported by the Secretary, Merchants' Exchange, Buffalo).

Date, 1900.	Wheat. Bush.	Corn. Bush.	Date, 1900.	Wheat. Bush.	Corn. Bush.
	Cts.	Cts.		Cts.	Cts.
April 25..................	2½	2¼	October 1....................	2½	2¼
May 22..................	2¼	2	" 5....................	2¾	2½
July 19..................	2½	2¼	" 31....................	3¾	3⅛
Aug. 3..................	2¾	1⅛	Nov. 15 to close............	3½	3
" 17..................	2¼	2			

The freight on oats varied from 1⅛ to 1⅝c. per bushel.

Pine lumber per 1,000 feet, was carried from Buffalo and Tonawanda to New York as follows: Opened at $2.00; June $2.00; July $1.65; August $1.50; October $1.75 closed at $2 00. Rates to Albany opened at $1.50; July $1.15; August $1.00; October $1.25; closed at $1.50.

AVERAGE CANAL FREIGHTS.

BUFFALO TO NEW YORK.

The following statement shows the average rates of canal freights on wheat and corn between Buffalo and New York during each month in the past ten years, and the highest and lowest rates on wheat and average rate on wheat in each:—

(Reported by Sec. Merchants' Exchange, Buffalo.)

Grain.		May. Cents.	June. Cents.	July. Cents.	Aug. Cents.	Sept. Cents.	Oct. Cents.	Nov. Cents.
1891	Wheat	2·8	2·9	2·8	3·8	4·2	4·6	4·0
	Corn	2·5	2·6	2·5	3·5	3·8	4·2	3·6

Highest rate, wheat, 1891, 3¾c.; lowest, 2·5c.; average for the season, 3·5c.

Grain.		May. Cents.	June. Cents.	July. Cents.	Aug. Cents.	Sept. Cents.	Oct. Cents.	Nov. Cents.
1892	Wheat	2·7	2·2	2·4	3·0	3·8	4·7	4·6
	Corn	2·4	2·0	2·2	2·6	3·4	4·4	4·3

Highest rate, wheat, 1892, 6c.; lowest, 2⅛c.; average for the season, 3·5c.

Grain.		May. Cents.	June. Cents.	July. Cents.	Aug. Cents.	Sept. Cents.	Oct. Cents.	Nov. Cents.
1893	Wheat	4·8	4·8	4·6	4·6	4·0	4·7	4·8
	Corn	4·4	4·4	4·3	4·2	3·6	4·3	4·5

Highest rate, wheat, 1893, 5c.; lowest, 3·6c.; average for the season, 4·6c.

Grain.		May. Cents.	June. Cents.	July. Cents.	Aug. Cents.	Sept. Cents.	Oct. Cents.	Nov. Cents.
1894	Wheat	3·1	2·9	3·3	3·4	3·6	2·9	3·0
	Corn	2·8	2·6	3·0	3·1	3·3	2·6	2·7

Highest rate, wheat, 1894, 4c.; lowest, 2·6c.; average for the season, 3·2c.

Grain.		May. Cents.	June. Cents.	July. Cents.	Aug. Cents.	Sept. Cents.	Oct. Cents.	Nov. Cents.
1895	Wheat	1·9	1·7	2·0	2·0	2·1	2·5	2·7
	Corn	1·7	1·5	1·7	1·7	2·0	2·2	2·5

Highest rate, wheat, 1895, 3c.; lowest, 1·9c.; average for the season, 2·2c.

Grain.		May. Cents.	June. Cents.	July. Cents.	Aug. Cents.	Sept. Cents.	Oct. Cents.	Nov. Cents.
1896	Wheat	3·7	3·7	3·7	3·7	3·7	3·7	3·8
	Corn	3·5	3·5	3·5	3·5	3·5	3·5	3·6

Highest rate, wheat, 1896, 4c.; lowest, 3·1c.; average for the season, 3·7c.

Grain.		May. Cents.	June. Cents.	July. Cents.	Aug. Cents.	Sept. Cents.	Oct. Cents.	Nov. Cents.
1897	Wheat	2·6	2·2	2·3	2·5	3·3	3·1	3·5
	Corn	2·2	1·8	2·0	2·2	2·8	2·6	3·0

Highest rate, wheat, 1897, 3·5c.; lowest, 2c.; average for the season, 2·8c.

Grain.		May. Cents.	June. Cents.	July. Cents.	Aug. Cents.	Sept. Cents.	Oct. Cents.	Nov. Cents.
1898	Wheat	3·0	2·9	2·8	2·7	2·6	3·0	3·0
	Corn	2·5	2·3	2·4	2·1	2·2	2·6	2·6

Highest rate, wheat, 1898, 3·4c.; lowest, 2·5c.; average for the season, 2·5c.

Grain.		May. Cents.	June. Cents.	July. Cents.	Aug. Cents.	Sept. Cents.	Oct. Cents.	Nov. Cents.
1899	Wheat	2·5	2·7	2·4	2·5	2·5	3·6	4·2
	Corn	2·3	2·3	2·1	2·1	2·2	3·0	3·5

Highest rate, wheat, 1899, 4·5c.; lowest, 2·5c.; average for the season, 3·c.

Grain.		May. Cents.	June. Cents.	July. Cents.	Aug. Cents.	Sept. Cents.	Oct. Cents.	Nov. Cents.
1900	Wheat	2·4	2·2	2·3	2·3	2·2	2·7	3·5
	Corn	2·1	2·0	2·1	2·0	2·0	2·4	3·0

Highest rate, wheat, 1900, 3½cc.; lowest, 2c.; average for the season, 2·5c.

NOTE.—Canal free of tolls since 1882.

FREIGHT, TOLLS, ELEVATING AND STORAGE RATES COMPARED.

The following statement shows the receipts of grain and flax seed at Buffalo, the average canal freight on wheat, and the tolls on wheat to New York, and the elevating and storage rates at Buffalo for a series of years (as reported by Secretary, Merchants' Exchange, Buffalo):

Year.	Grain received.	Average Canal Freight on Wheat.	Tolls on Wheat.	Elevating, including Storage.
	Bush.	Cts.	Cts.	Cts.
1870	32,208,039	11·2	3·1	1¼
1871	61,319,313	12·6	3·1	1¼
1872	58,703,666	13·0	3·1	1¼
1873	65,498,955	11·4	3·1	1¼
1874	55,660,198	10·0	3·1	1¼
1875	52,833,451	7·9	2·0	1
1876	44,207,121	6·6	2·0	1
1877	61,822,292	7·4	1·0	1
1878	78,828,443	6·0	1·0	1
1879	75,089,768	6·8	1·0	1
1880	105,133,009	6·5	1·0	1
1881	56,389,827	4·7	1·0	⅞
1882	51,501,503	5·4	1·0	⅞
1883	65,722,080	4·9	None.	⅞
1884*	58,011,800	4·2	do	⅞
1885*	52,671,090	3·8	do	⅞
1886*	75,570,850	5·0	do	⅞
1887*	87,073,570	4·6	do	⅞
1888*	73,977,390	3·4	do	⅞
1889*	92,290,550	4·8	do	⅞
1890*	91,994,680	3·8	do	⅞
1891*	135,315,510	3·5	do	⅞
1892*	138,872,560	3·5	do	⅞
1893*	140,796,410	4·6	do	⅞
1894*	105,435,577	3·2	do	⅞
1895*	121,225,497	2·2	do	⅞
1896*	172,474,664	3·7	do	⅞
1897*	204,964,103	2·8	do	⅞
1898*	221,383,945	2·8	do	⅝ to nothi'g
1899*	153,393,184	3·0	do	½
1900*	157,655,968	2·5	do	½

NOTE—Prior to 1870 tolls 6·21 cents per bushel, and the elevating charge 2 cents per bushel.

* Including flax seed.

AVERAGE FREIGHT CHARGES PER BUSHEL.

For the transportation of wheat and corn from Chicago to New York for a series of years.

(From Report of Board of Trade, Chicago.)

	CORN.			WHEAT.		
	By lake and canal.	By lake and rail.	By all rail.	By lake and canal.	By lake and rail.	By all rail.
1858	·127	....	·3619	·1550	....	·3861
1859	·1570	....	·3248	·1663	....	·3480
1860	*a*·0833	....	·3248	*a*·095	....	·3480
1861	*a*·1062	....	·3881	*a*·1210	....	·4158
1862	*a*·0957	....	·4480	*a*·1062	....	·4800
1863	*a*·063	....	·4592	*a*·072	....	·4920
1864	*a*·09	....	·5600	*a*·0952	....	·60
1865	*a*·0864	....	·4188	*a*·0894	....	·4488
1866	*a*·1075	....	·4312	*a*·1377	....	·4620
1867	*a*·0511	....	·4176	*a*·08	....	·4475
1868	*a*·0604	....	·3532	*a*·0802	....	·3784
1869	*a*·0584	·2355	·3320	*a*·0651	·2520	·3557
1870	*a*·16	·2220	·28	*a*·0677	·2250	·30
1871	*a*·0754	·2372	·2968	*a*·0687	·2542	·3180
1872	*a*·1072	·2660	·3266	*a*·1110	·2950	·3499
1873	*a*·0816	·2298	·2893	*a*·0917	·2461	·3102
1874	*a*·0382	·1388	·2450	*a*·0400	·1709	·2625
1875	*a*·034	·1303	·2240	*a*·0378	·1389	·2400
1876	*b*·0875	·1079	·1574	*b*·0982	·1136	·1686
1877	*b*·0959	·1406	·1890	*b*·1109	·1546	·2050
1878	*b*·0883	·1053	·1652	*b*·0996	·1209	·1770
1879	*b*·1049	·1220	·1456	*b*·1187	·1313	·1774
1880	*b*·1341	·1443	·1748	*b*·1313	·1580	·1980
1881	*b*·0777	·0942	·1340	*b*·0867	·1049	·1440
1882	*b*·0672	·1028	·1350	*b*·0723	·1091	·1447
1883	*b*·0803	·11	·1512	*b*·0901	·1163	·1620
1884	*b*·0655	·085	·1232	*b*·07	·10	·1320
1885	*b*·063	·0801	·1232	*b*·0654	·0902	·1320
1886	*b*·0845	·1120	·14	*b*·0910	·12	·1500
1887	*b*·0850	·1120	·1470	*b*·0950	·12	·1575
1888	*b*·0671	·1026	·1354	*b*·0705	·1114	·1450
1889	*b*·0632	·0819	·126	*b*·0692	·0897	·1500
1890	*b*·0593	·0732	·1136	*b*·0676	·0852	·1430
1891	*b*·0632	·0753	·1400	*b*·0695	·0857	·1500
1892	*b*·0595	·0721	·1296	*b*·0645	·0759	·1380
1893	*b*·0718	·0797	·1365	*b*·0766	·0848	·1463
1894	*b*·0493	·0650	·1232	*b*·0511	·0700	·1320
1895	*b*·0450	·0640	·1029	*b*·0486	·0696	·1189
1896	*b*·0575	·0615	·1050	*b*·0619	·0661	·1200
1897	*b*·0453	·0692	·1143	*b*·0522	·0742	·1250
1898	‡·0381	·0441	·0980	‡·0445	·0491	·1200
1899	‡·0508	·0583	·1008	‡·0581	·0663	·1160
1900	...	....	·0919	....	....	·0996

a To Buffalo only. *b* Including Buffalo charges and tolls. ‡ Exclusive of Buffalo charges.

FOREIGN FREIGHT RATES.

ANNUAL average Freight Rates on Grain, Flour and Provisions (per 100 lbs.) from Chicago to European Ports, by all Rail to Sea-board and thence by steamers.

Shipped to	Articles.	1900.	1899.	1898.	1897.	1896.
		$		$	$	$
Liverpool	Grain	·2498	·2972	·3435	·3360	·3350
"	Sacked flour	·2790	·3012	·3766	·3681	·3430
"	Provisions	·4884	·4050	·4715	·4440	·4491
Glasgow	Grain	·3098	·3235	·3600	·3523	·3422
"	Sacked flour	·3156	·3125	·3906	·3906	·3650
"	Provisions	·5531	·4469	·5250	·5250	·4997
London	Grain	·3110	·3060	·3500	·3400	·3348
"	Sacked flour	·3501	·3350	·3725	·3612	·3528
"	Provisions	·5587	·4414	·4969	·4814	·4715
Antwerp	"	·5109	·4750	·5250	·5109	·4969
Hamburg	"	·5000	·4600	·5200	·5100	·5100
Amsterdam	"	·5100	·4700	·5250	·5200	·5200
Rotterdam	"	·5100	·4700	·5250	·5200	·5200
Copenhagen	"	·5531	·5172	·5813	·5728	·5812
Stockholm	"	·6450	·6297	·6925	·6853	·6937
Stettin	"	·5531	·5172	·5813	·5728	·5812
Bordeaux	"	·6412	·5912	·6575	·6413	·6413

LAKE FREIGHTS ON COAL FROM BUFFALO TO CHICAGO AND OTHER PORTS.

The following statement shows the ruling rates on Coal, per net ton, in cents from Buffalo to the Ports named, during the season of 1900, for the week ending on the dates specified :—

Week ending.	Chicago.	Milwaukee.	Duluth and Superrior.	Racine.	Waukegan.	Toledo.
1900.	cts.	cts.	cts.	cts.	cts.	cts.
April 7	75	70	50	....	....	40
" 13	75	70	50	....	80	40
May 1	75	70	50	....	75	40
" 3	75	70	50	75	75	40
June 16	75	70	40	75	75	40
" 18	65	60	40	65	65	40
July 13	50	50	40	65	65	40
" 23	40	40	40	65	65	40
" 27	40	40	35	40	65	35
Aug. 11	30	30	30	40	65	35
" 13	30	30	30	40	35	35
" 20	30	30	30	35	35	30
Oct. 12	30	30	30	40	35	30
" 19	30	30	30	50	35	30
" 22	50	50	30	50	35	30
" 27	75	75	30	50	35	30
Nov. 24	75	75	30	70	35	30
" 28	75	75	75	70	....	....
" 30	75	75	75	100	....	....

TOTAL VALUES of Merchandise Received from British North America for Immediate Transit across United States Territory, for Immediate Transhipment in Ports of the United States to British North America, and so shipped, during each year from 1873 to 1900 inclusive.

YEAR ENDING JUNE 30.	COUNTRIES FROM WHICH RECEIVED.					COUNTRIES TO WHICH SHIPPED.				
	British North America.					British North America.				
	Nova Scotia, New Brunswick, and Prince Edward Island.	Quebec, Ontario, Manitoba and the North-west Territories.	British Columbia.	Newfoundland and Labrador.	Total.	Nova Scotia, New Brunswick, and Prince Edward Island.	Quebec, Ontario, Manitoba and the North-west Territories.	British Columbia.	Newfoundland and Labrador.	Total.
	$	$	$	$	$	$	$	$	$	$
1873	495,289	12,894,164	5,240	....	13,394,693	5,282,290	21,320,174	181,720	....	26,784,184
1874	449,655	13,616,344	97,691	....	14,163,690	7,150,036	19,843,169	317,534	....	27,310,739
1875	443,570	17,342 933	256,074	....	18,042,577	8,999,596	20,283,639	517,060	....	29,800,295
1876	261,443	22,134,275	195,047	1,137	22,591,902	9,102,600	14,658,358	658,836	94	24,419,888
1877	160,658	12,092,619	218,418	....	12,471,695	2,879,422	15,551,238	544,018	2,475	18,977,153
1878	163,978	11,627,114	412,966	....	12,204,058	951,268	11,436,470	524,013	934	12,912,685
1879	194,129	11,606,832	280,079	55	12,081,095	889,539	11,520,877	476.824	2,347	12,889,587
1880	215,131	16,782,315	137,271	....	17,134,717	1,643,716	14,866,663	531,436	288	17,042,103
1881	171,383	16,758,108	72,555	....	17,002,046	1,778,836	20,857,827	719,268	333	23,356,264
1882	164,990	28,265,083	113,018	87	28,543,178	2,732,665	34,005,845	855,784	1,190	37,595,484
1883	561,791	29,204,031	36,973	25	29,802,820	2,455,557	35,878,389	971,307	7,335	39,312,568
1884	656,233	12,574,953	188,041	....	13,419,227	1,740,900	19,717,466	1,475,833	5,186	22,939,885
1885	933,806	12,280,483	308,691	633	13,523,613	1,635,442	16,448,942	1,615,293	781	19,700,458
1886	1,165,973	9,303,864	359,104	32,079	10,861,020	2,040,298	16,369,429	1,825,178	6,174	20,241,079
1887	1,684,730	9,606,175	213,816	....	11,504,721	1,621,748	19,930,296	635,841	70	22,187,955
1888	1,525,048	6,417,701	372,934	27,134	8,542,817	1,781,028	13,459,169	370,322	1,137	13,611,656
1889	2,596,233	8,355,178	294,359	89,853	11,336,123	2,484,787	18,993,967	665,527	2,704	22,146,975
1890	3,070,657	12,449,772	306,897	174,584	16,001,910	5,277,210	21,140,198	913,106	4,690	27,335,204
1891	3,859,079	15,310,945	422,806	187,640	19,780,470	5,605,614	21,695,992	547,144	34,273	27,883,023
1892	4,393,062	19,005,704	201,373	328,116	23,928,255	2,079,783	24,189,181	428,188	6,962	26,704,114
1893	1,009,597	16,404,425	89,565	381,986	17,885,573	2,052,357	20,232,400	409,055	26,289	22,720,111
1894	1,070,676	15,649,881	348,069	273,467	17,342,093	1,831,417	17,880,688	463,471	6,640	20,182,216
1895	1,199,782	17,774,108	411,557	236,415	19,621,862	1,834,745	19,320,714	558,991	7,844	21,722,294
1896	1,118,185	18,038,931	582,469	404,020	20,143,605	1,572,783	19,441,279	772,586	1,768	21,788,416
1897	1,118,055	22,497,151	611,322	367,295	24,593,823	1,682,538	17,660,211	1,312,797	8,130	20,663,676
1898	1,440,950	35,596,039	1,744,289	555,706	39,336,984	1,536,413	22,400,622	2,294,356	19,247	26,250,638
1899	1,618,399	30,673,265	3,708,928	561,129	36,561,721	1,215,518	19,605,819	4,685,559	27,147	25,535,043
1900	2,002,264	37,657,936	3,914,668	553,031	44,127,899	1,245,771	27,452,333	2,730,612	49,555	31,478,271

TOTAL VALUE of Merchandise received from the Principal and other Foreign Countries for Immediate Transit across United States Territory or for Immediate Transhipment in Ports of the United States to other foreign countries, and so shipped, for each Year from 1868 to 1900 inclusive.

Year ending June 30.	Countries from which Received.						Countries to which Shipped.						Total Value of Merchandise received and shipped.
	Great Britain and Ireland.	Germany.	British North American Possessions.	Mexico.	Cuba.	Other Countries.	Great Britain and Ireland.	Germany.	British North American Possessions.	Mexico.	Cuba.	Other Countries.	
	$	$	$	$	$	$	$	$	$	$	$	$	$
1868....	10,664,576	132,074	4,864,209	14,967	4,263,621	1,576,157	2,025,023	3,212,123	14,375,419	481,643	116,521	1,304,875	21,516,604
1869....	10,891,698	150,382	5,852,678	60,715	2,373,474	1,767,037	2,693,525	1,547,602	15,033,821	448,300	72,875	1,299,861	21,095,984
1870....	10,210,455	302,806	7,215,973	103,977	3,309,227	2,049,422	2,946,053	2,116,249	16,689,037	321,331	135,915	983,275	23,191,860
1871....	13,473,915	322,110	7,954,060	344,179	1,367,573	1,913,200	4,031,319	1,033,307	18,406,475	346,872	345,224	1,211,840	25,375,037
1872....	17,633,231	227,232	9,276,169	174,104	2,227,422	1,847,162	2,743,494	2,263,819	24,042,790	358,151	179,570	1,797,496	31,385,320
1873....	19,144,815	250,704	13,394,693	286,607	5,737,904	1,284,462	5,144,175	5,622,325	26,784,184	235,113	319,771	1,993,617	40,099,185
1874....	18,832,900	211,907	14,163,690	151,920	4,563,869	926,390	5,391,201	3,866,642	27,310,739	665,214	520,493	1,096,387	38,850,676
1875 ...	18,657,276	325,648	18,042,577	115,527	1,759,308	1,785,947	7,229,912	1,495,285	29,800,295	1,155,004	248,358	757,429	40,686,283
1876....	14,304,197	290,489	22,591,902	226,315	2,962,963	1,686,789	11,791,200	2,958,558	24,419,888	1,129,440	600,061	1,163,508	42,062,655
1877....	13,732,085	337,897	12,471,695	158,852	1,095,451	1,460,793	7,758,501	1,108,298	18,977,153	329,577	306,311	776,933	29,256,773
1878....	10,084,510	378,768	12,204,058	146,822	3,041,957	1,481,033	9,577,050	2,905,230	12,912,685	316,664	319,611	1,305,908	27,337,148
1879....	8,795,340	521,917	12,081,095	222,320	1,954,042	1,521,153	8,175,951	2,252,572	12,889,587	330,968	174,757	1,272,032	25,095,867
1880....	10,311,139	620,704	17,134,747	239,655	3,606,099	1,942,405	10,856,579	3,658,477	17,042,103	300,148	224,848	1,775,594	33,857,749
1881....	14,898,052	721,344	17,002,046	217,444	2,642,550	2,222,122	9,122,079	2,729,246	23,356,264	671,008	177,340	1,648,121	37,704,048
1882....	18,911,637	755,560	28,543,178	380,100	5,662,926	3,812,058	11,592,806	5,336,361	37,595,484	800,025	319,257	2,421,526	58,065,459
1883....	20,242,222	1,149,195	29,802,820	281,309	3,126,069	4,276,712	11,089,865	2,758,994	39,312,568	2,282,473	352,552	3,081,875	58,878,327
1884....	14,038,694	948,901	13,419,227	408,124	3,655,568	4,345,878	5,288,389	2,960,488	22,939,385	2,748,434	221,061	2,656,635	36,814,392
1885....	11,064,186	1,140,548	13,523,613	308,293	4,853,354	3,545,544	7,235,519	3,771,524	19,700,458	1,262,515	119,376	2,346,146	34,435,538
1886....	13,142,644	1,462,414	10,861,020	216,078	6,797,879	4,558,229	8,510,097	3,803,566	20,241,079	1,279,399	452,700	2,751,423	37,038,264
1887....	17,977,200	1,670,952	11,504,721	111,635	6,780,853	4,720,760	10,052,219	4,353,992	22,187,955	2,002,476	6[illegible]8,121	3,561,358	42,766,121
1888....	13,707,240	1,817,511	8,342,817	120,497	4,820,846	4,534,298	6,853,195	2,551,043	15,611,656	3,766,180	563,539	3,997,596	33,343,209
1889....	19,080,647	2,582,456	11,336,123	296,654	9,054,736	5,052,610	9,233,659	4,581,064	22,146,975	4,781,110	892,158	5,768,287	47,403,253
1890....	20,664,427	2,735,546	16,002,384	639,050	9,759,256	5,898,763	10,656,465	5,097,434	27,335,678	4,944,149	1,215,399	6,450,301	55,699,426
1891....	20,879,851	2,819,238	19,780,470	565,338	6,977,901	6,475,119	11,968,808	3,640,940	27,883,023	5,052,318	966,851	7,985,977	57,497,917
1892....	21,334,783	2,930,571	23,928,255	1,383,455	11,054,445	8,936,228	20,141,862	6,995,419	26,704,114	4,953,911	1,472,980	9,299,451	69,567,737
1893....	20,387,339	3,466,885	17,885,573	1,652,200	10,131,171	14,426,669	18,511,287	7,986,637	22,720,111	4,607,549	2,034,761	12,089,492	67,949,837
1894....	19,641,622	3,717,740	17,342,093	1,858,367	9,916,742	19,031,011	18,394,865	11,154,933	20,182,216	4,543,455	2,586,919	16,645,187	71,507,575
1895....	18,531,083	4,122,899	19,621,862	2,515,091	10,420,277	10,465,981	20,562,325	6,684,735	21,722,294	4,512,293	1,951,985	10,243,561	65,677,193
1896....	19,420,751	3,460,489	20,143,605	1,797,161	11,668,243	13,272,521	20,022,263	7,942,844	21,788,416	5,210,607	1,890,705	12,907,932	69,762,770
1897....	17,513,324	3,183,390	24,593,823	1,903,924	9,589,820	13,275,822	24,809,259	5,333,860	20,663,676	5,320,563	2,058,454	11,874,291	70,060,103
1898....	18,931,226	3,775,038	39,336,984	2,625,521	4,763,587	11,587,069	33,276,696	3,807,811	26,250,638	5,543,843	1,728,780	10,411,607	81,019,375
1899....	16 594,043	4,069,828	36,561,721	3,519,942	8,372,450	10,910,462	29,695,600	5,711,338	25,535,043	5,669,214	2,760,086	10,657,165	80,028,446
1900....	23,152,099	3,915,766	44,127,899	4,245,695	9,316,066	13,793,937	37,383,450	6,488,502	31,478,271	6,965,660	3,484,521	12,751,058	98,551,462

FOREIGN CARRYING TRADE.

Value of the Imports and Exports of the United States carried respectively in cars and other land vehicles, in American vessels and in foreign vessels during each Fiscal Year, from 1857 to 1900 inclusive, with the percentage carried in American vessels (coin and bullion are included from 1857 to 1879 inclusive,) as method of transportation of specie and merchandise cannot be separately stated.

Year ending June 30.	Imports.			Exports.			Imports and Exports.				Percentage carried in American vessels.
	In cars and other land vehicles	In American vessels.	In Foreign vessels.	In cars and other land vehicles	In American vessels.	In Foreign vessels.	In cars and other land vehicles	In American vessels.	In Foreign vessels.	Total.	
	$	$	$	$	$	$	$	$	$	$	
1857	......	259,116,170	101,773,971	......	251,214,857	111,745,825	......	510,331,027	213,519,796	723,850,823	70·5
1858	......	203,700,016	78,913,134	......	243,491,288	81,153,133	......	447,191,304	160,066,267	607,257,571	73·7
1859	......	216,123,428	122,644,702	......	249,617,953	107,171,509	......	465,741,381	229,816,211	695,557,592	66·9
1860	......	228,164,855	134,001,399	......	279,082,902	121,039,394	......	507,247,757	255,040,793	762,288,550	66·5
1861	......	201,544,055	134,106,098	......	179,972,733	69,372,180	......	381,516,788	203,478,278	584,995,066	65·2
1862	......	92,274,100	113,497,629	......	125,421,318	104,517,667	......	217,695,418	218,015,296	435,710,714	50·0
1863	......	109,744,580	143,175,340	......	132,127,891	199,880,691	......	241,872,471	343,056,031	584,928,502	41·4
1864	......	81,212,077	248,350,818	......	102,849,409	237,442,730	......	184,061,486	485,793,548	669,855,034	27·5
1865	......	74,385,116	174,170,336	......	93,017,756	262,839,588	......	167,402,872	437,010,124	604,412,996	27·7
1866	......	112,040,395	333,471,763	......	213,671,466	351,754,928	......	325,711,861	685,226,691	1,010,938,552	32·2
1867	......	117,209,536	300,622,035	......	180,625,368	280,708,368	......	297,834,904	581,330,403	879,165,307	33·9
1868	......	122,965,225	248,659,583	......	175,106,348	301,886,491	......	297,981,573	550,546,074	848,527,647	35·1
1869	......	136,802,024	300,512,231	......	153,154,748	285,979,781	......	289,956,772	586,492,012	876,448,784	33·1
1870	......	153,237,077	309,140,510	......	199,732,324	329,786,978	......	352,969,401	638,927,488	991,896,889	35·6
1871	15,187,354	163,285,710	363,020,644	7,798,156	190,378,462	392,801,932	22,985,510	353,664,172	755,822,576	1,132,472,258	31·2
1872	17,635,681	177,286,302	445,416,783	10,015,089	168,044,799	393,929,579	27,650,770	345,341,101	839,346,362	1,212,328,233	28·5
1873	17,070,548	174,739,834	471,806,765	10,799,430	171,566,758	494,915,886	27,869,978	346,306,592	966,723,651	1,340,899,221	25·8
1874	14,513,335	176,027,778	405,320,135	8,509,205	174,424,216	533,885,971	23,022,540	350,451,994	939,206,106	1,312,680,640	26·7
1875	13,083,859	157,872,726	382,949,568	7,304,356	156,385,066	501,838,949	20,388,235	314,257,792	884,788,517	1,119,434,544	25·8
1876	12,148,667	143,389,704	321,139,500	6,324,487	167,686,467	492,215,487	18,473,154	311,076,171	813,354,987	1,142,904,312	27·2
1877	10,697,640	151,834,067	329,565,833	6,767,170	164,826,214	530,354,703	17,464,810	316,660,281	859,920,536	1,194,045,627	26·5
1878	12,965,999	146,499,282	307,407,565	7,511,365	166,551,624	569,583,564	20,477,364	313,050,906	876,991,129	1,210,519,399	25·9
1879	11,983,823	143,590,353	310,499,599	7,439,862	128,425,339	600,769,633	19,423,685	272,015,692	911,269,232	1,202,708,609	22·6
1880	15,142,465	149,317,368	503,494,913	5,838,928	109,029,209	720,770,521	20,981,393	258,346,577	1,224,265,434	1,503,593,404	17·18
1881	17,193,213	133,631,146	491,840,269	8,259,308	116,955,324	777,162,714	25,452,521	250,586,470	1,269,002,983	1,545,041,974	16·22
1882	22,854,946	130,266,826	571,517,802	12,118,371	96,962,919	641,460,967	34,973,317	227,229,745	1,212,978,769	1,475,181,831	15·40
1883	23,003,048	136,002,290	564,175,576	25,089,844	104,418,210	694,331,348	48,092,892	240,420,500	1,258,506,024	1,547,020,316	15·54
1884	20,140,294	135,046,207	512,511,192	26,573,774	98,652,828	615,287,007	46,714,068	233,699,035	1,127,798,199	1,408,211,302	16·60
1885	21,149,476	112,864,052	443,513,801	24,183,299	82,001,691	636,004,765	45,332,775	194,865,743	1,079,518,566	1,319,717,084	14·76
1886	24,555,683	118,942,817	491,937,636	19,144,667	78,406,680	581,973,477	43,700,350	197,349,503	1,073,911,113	1,314,960,966	15·01
1887	27,562,059	121,365,493	543,392,216	21,389,666	72,991,253	621,802,292	48,951,725	194,356,746	1,165,194,508	1,408,502,979	13·80

VALUE of the Imports and Exports of the United States carried respectively in cars and other land vehicles, &c.—*Concluded.*

Year ending June 30.	IMPORTS.			EXPORTS.			IMPORTS AND EXPORTS.				Percentage carried in American vessels.
	In cars and other land vehicles	In American vessels.	In Foreign vessels.	In cars and other land vehicles	In American vessels.	In Foreign vessels.	In cars and other land vehicles	In American vessels.	In Foreign vessels.	Total.	
	$	$	$	$	$	$	$	$	$	$	
1888	32,209,459	123,525,298	568,222,357	22,147,368	67,332,175	606,474,964	54,356,827	190,857,473	1,174,697,321	1,419,911,621	13·44
1889	38,227,861	120,782,910	586,120,881	28,436,517	83,022,198	630,942,660	66,664,378	203,805,108	1,217,063,541	1,487,533,027	13·70
1890	40,621,361	124,948,948	623,740,100	32,949,902	77,502,138	747,376,644	73,576,263	202,451,086	1,371,116,744	1,647,139,093	12·29
1891	40,932,755	127,471,678	676,511,763	31,923,439	78,968,047	773,589,324	72,856,194	206,439,725	1,450,101,087	1,729,397,006	11·94
1892	39,726,595	139,139,891	648,535,976	33,220,629	81,033,844	916,023,675	72,947,224	220,173,735	1,564,559,651	1,857,680,610	11·85
1893	44,121,094	127,095,434	695,184,394	43,862,947	70,670,073	733,132,174	87,984,041	197,765,507	1,428,316,568	1,714,066,116	12·2
1894	29,623,095	121,561,193	503,810,334	49,221,427	73,707,023	769,212,122	78,844,522	195,268,216	1,273,022,456	1,547,135,194	13·3
1895	33,201,988	108,229,615	590,538,362	49,902,754	62,277,581	695,357,830	83,104,742	170,507,196	1,285,896,192	1,589,508,130	11·7
1896	35,535,079	117,299,074	626,890,521	61,131,125	70,392,813	751,083,000	96,666,204	187,691,887	1,377,973,521	1,662,331,612	12·00
1897	35 812,620	109,133,454	619,784,338	65,082,305	79,441,823	905,969,428	100,894,925	189,075,277	1,525,753,766	1,815,723,968	11·00
1898	30,427,784	93,535,867	492,086,003	73,283,704	67,792,150	1,090,406,476	103,711,488	161,328,017	1,582,492,479	1,847,531,984	9·30
1899	33,424,821	82,050,118	581,673,550	83,870,907	78,562,088	1,064,590,307	117,295,728	160,612,206	1,646,263,857	1,924,171,791	8 9
1900	44,412,509	104,304,940	701,223,735	110,483,141	90,779,252	1,193,220,689	154,895,650	195,084,192	1,894,444,424	2,244,424,266	9·3

NOTES.—1. The amounts carried in cars and other land vehicles, were not separately stated prior to July 1, 1870. 2. Exports are stated in mixed gold and currency values from 1862 to 1879, inclusive.

Statement showing the Total Values of Foreign Merchandise transported in the In-Transit and Transhipment Trade of the United States with the British North American Possessions during each year from 1871 to 1900.

Year ending June 30.	Received for transit and transhipment from British North American Possessions.			Shipped in transit to or transhipment for British North American Possessions.		
	By Land.	By Water.	Total.	By Land.	By Water.	Total.
	$	$	$	$	$	$
1871	6,035,585	1,918,475	7,954,060	15,624,591	2,781,884	18,406,475
1872	8,237,859	1,038,310	9,276,169	19,357,342	4,685,448	24,042,790
1873	11,700,787	1,693,906	13,394,693	20,178,666	6,605,518	26,784,184
1874	12,695,590	1,468,100	14,163,690	20,572,299	6,938,430	27,510,739
1875	16,890,022	1,152,555	18,042,577	23,794,129	6,006,166	29,800,295
1876	21,301,262	1,290,640	22,591,902	19,369,958	5,049,930	24,419,888
1877	10,835,642	1,636,053	12,471,695	17,066,855	1,910,298	18,977,153
1878	10,314,534	1,889,524	12,204,058	11,914,321	998,364	12,912,685
1879	10,098,998	1,982,097	12,081,095	12,030,635	858,952	12,889,587
1880	15,265,177	1,869,570	17,134,747	16,388,673	653,430	17,042,003
1881	15,200,967	1,801,079	17,002,046	22,828,270	527,994	23,356,264
1882	24,665,029	3,878,149	28,543,178	36,613,465	982,019	37,595,484
1883	26,382,370	3,420,450	29,802,820	38,389,318	923,250	39,312,568
1884	13,043,498	375,729	13,419,227	22,120,587	818,798	22,939,385
1885	12,755,686	767,927	13,523,613	19,105,476	594,982	19,700,458
1886	9,593,344	1,267,676	10,861,020	19,428,867	812,212	20,241,079
1887	9,377,041	2,127,680	11,504,721	20,178,365	2,009,590	22,187,955
1888	6,309,024	2,033,793	8,342,817	13,347,876	2,063,780	15,611,656
1889	8,303,171	3,032,952	11,336,123	19,299,966	2,849,263	22,149,229
1890	13,524,298	2,477,612	16,001,910	24,788,152	2,547,052	27,335,201
1891	18,065,925	1,714,545	19,780,470	25,185,706	2,697,317	27,883,023
1892	21,346,413	2,581,842	23,928,255	23,989,746	2,714,368	26,704,114
1893	13,807,662	4,077,911	17,885,573	20,151,432	2,568,679	22,720,111
1894	13,501,664	3,840,429	17,342,093	17,974,332	2,207,884	20,182,216
1895	14,068,922	5,552,940	19,621,862	18,752,226	2,970,068	21,722,294
1896	13,408,578	6,735,027	20,143,605	18,335,373	3,453,043	21,788,416
1897	17,665,422	6,928,401	24,593,823	18,430,841	2,232,835	20,663,676
1898	27,277,049	12,059,935	39,336,984	22,792,971	3,457,667	26,250,638
1899	28,248,759	8,312,962	36,561,721	22,593,761	2,941,282	25,535,043
1900	33,346,150	10,781,749	44,127,899	27,996,981	3,481,290	31,478,271

Note.—This movement forms no part of the import and export trade.

C.—TABLE showing the Tonnage of the undermentioned Articles moved

Years.	Vegetable Food.						
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Vegetable Food.*
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869	71,051	670,534	256,475	99,012	92,309	13,489	99,743
1870	54,978	658,524	193,129	123,191	117,941	19,520	127,727
1871	41,211	748,549	672,057	113,992	129,891	34,563	109,935
1872	20,534	403,903	902,753	120,061	92,959	13,357	120,753
1873	19,307	803,064	637,296	70,586	70,023	30,160	114,735
1874	29,134	772,163	519,203	98,654	59,408	8,215	280,821
1875	17,635	744,293	282,031	104,475	62,717	8,309	86,090
1876	9,290	416,376	365,254	96,494	52,147	19,949	104,783
1877	8,923	448,043	723,458	139,453	66,045	35,948	77,114
1878	5,904	844,555	734,993	89,534	85,029	64,613	88,106
1879	7,164	949,466	621,180	96,144	23,164	59,210	77,071
1880	8,266	966,052	1,156,619	106,247	20,893	26,340	86,673
1881	6,926	444,832	475,823	81,587	30,321	15,484	61,588
1882	9,372	642,215	251,687	96,650	22,180	43,372	53,300
1883	9,047	573,740	522,978	58,787	51,607	95,246	67,595
1884	7,251	790,409	198,216	65,008	52,696	71,462	51,944
1885	6,869	565,922	359,982	64,587	8,234	10,211	47,505
1886	9,005	993,129	354,765	62,854	7,278	3,073	59,782
1887	4,089	936,840	446,617	75,458	35,365	6,717	47,678
1888	3,287	491,419	499,218	41,100	70,315	12,532	49,087
1889	4,429	484,141	592,550	66,110	63,674	36,329	49,663
1890	3,489	353,738	616,702	90,754	48,438	21,657	33,123
1891	3,126	756,101	142,141	71,903	16,362	68,771	33,951
1892	4,879	620,768	150,269	51,596	72,444	4,236	33,807
1893	2,367	1,093,927	252,283	49,651	24,714	6,518	20,656
1894	2,909	903,361	275,377	89,700	100,874	5,288	22,620
1895	2,240	280,550	94,403	77,868	87,839	205	59,400
1896	7,963	408,872	100,227	109,967	197,713	77.210	55,230
1897	3,206	180,035	312,776	100,337	50,345	66,387	31,489
1898	1,854	69,986	364,248	89,906	76,244	7,745	43,044
1899	1,247	282,422	92,670	78,627	93,733	5,931	22,856
1900	1,171	138,302	189,013	63,204	36,435	10,478	34,254

* Apples, meal, all kinds, pease, potatoes.

on all Canals in the State of New York, during a series of thirty-two years.

	Heavy Goods.					
Total.	Railway Iron	Other Iron.	Salt.	Coal.	Ores.	Total.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1,302,613	137,677	79,652	263,333	1,324,408	183,992	1,989,062
1,295,010	135,930	89,708	266,740	1,558,185	238,802	2,289,365
1,850,198	178,269	100,310	248,709	1,194,037	289,952	2,011,277
1,674,320	161,667	96,996	248,558	1,462,590	377,592	2,347,403
1,745,171	53,363	62,581	216,706	1,625,859	415,968	2,374,477
1,767,598	24,511	82,955	173,590	1,413,162	232,544	1,926,762
1,305,550	36,603	95,305	186,785	1,217,091	283,219	1,819,003
1,064,293	11,691	69,450	114,070	1,036,698	173,530	1,405,439
1,498,984	10,341	58,828	156,918	1,286,881	250,573	1,763,541
1,912,734	8,385	65,642	139,927	889,873	210,078	1,313,905
1,833,399	27,634	99,568	136,021	971,074	314,411	1,548,708
2,371,090	93,613	139,993	144,487	959,342	370,884	1,709,319
1,116,561	78,650	205,005	113,756	1,092,003	337,873	1,827,287
1,118,776	58,921	122,786	108,040	1,228,435	364,361	1,882,543
1,379,000	46,553	47,412	190,392	1,152,849	293,892	1,731,098
1,236,986	28,513	54,471	161,788	954,288	210,610	1,400,670
1,063,310	12,215	38,726	161,272	1,025,941	195,750	1,433,904
1,489,886	10,878	152,030	112,002	857,884	269,914	1,402,708
1,552,764	21,368	224,979	124,054	905,424	243,578	1,539,403
1,166,958	2,596	43,881	106,344	1,219,680	259,269	1,631,770
1,296,896	3,278	78,135	112,100	1,094,897	234,948	1,523,358
1,167,901	5,800	26,804	93,181	830,154	202,072	1,157,291
1,092,355	1,960	36,770	81,232	881,502	215,686	1,217,150
937,999	524	40,073	93,216	832,397	136,612	1,102,822
1,450,116	536	25,204	52,094	741,934	102,275	922,043
1,400,129	267	22,614	70,353	609,368	37,641	740,243
602,505	4,263	59,402	71,334	766,723	144,076	1,045,798
957,182	1,568	74,651	83,309	682,167	89,998	931,693
744,575	5,080	71,117	66,879	646,803	76,311	866,190
653,027	6,288	101,216	85,525	626,616	73,199	892,844
577,486	2,725	69,106	91,068	777,743	205,234	1,145,876
472,857	833	49,036	88,635	809,187	103,514	1,051,205

D.—TABLE showing the total Tonnage of the undermentioned Articles moved Up and

YEAR.	VEGETABLE FOOD.						
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles. †
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869*........	45,674	313,825	120,599	20,951	....	904	1,937
1872.........	26,651	239,998	254,902	6,035	7,752	64	2,745
1873.........	30,665	355,847	180,169	8,225	1,194	3	3,777
1874.........	24,019	413,212	181,151	18,871	5,954	513	8,677
1875.........	13,964	253,835	103,749	35,751	3,383	917	6,337
1876	15,778	201,906	144,501	18,455	24,496	1,454	3,198
877.........	13,558	253,953	169,196	19,870	2,810	2,439	2,355
1878.........	9,121	191,982	185,931	10,979	3,088	....	2,302
1879.........	10,710	274,570	144,506	4,655	1,239	440	2,444
1880.........	12,679	242,020	163,738	17,772	477	1,016	1,480
1881.........	9,959	127,832	101,075	24,509	....	1,844	2,086
1882.........	12,261	215,056	54,799	20,126	611	3,226	403
1883.........	13,471	152,794	182,269	10,436	731	1,642	10,983
1884.........	13,683	144,851	118,811	7,155	10,746	1,320	9,168
1885.........	13,334	124,206	117,536	15,801	1,116	....	1,912
1886.........	19,474	154,169	219,442	1,595	4,911	564	14,657
1887.........	23,949	221,927	114,938	9,574	12,050	....	12,533
1888.........	16,983	160,963	194,886	5,906	26,629	811	13,608
1889.........	7,931	126,664	353,595	4,272	28,356	2,673	18,552
1890.........	14,461	118,002	327,394	10,830	27,728	1,549	20,876
1891.........	13,517	198,658	185,180	8,113	52,959	65,888	28,042
1892.........	17,046	232,019	192,548	6,433	37,173	9,392	32,815
1893...	15,235	258,392	441,092	18,599	31,283	3,671	36,981
1894.........	33,628	270,993	169,233	28,353	27,962	567	60,673
1895.........	44,044	203,088	164,894	8,689	18,236	1,007	46,463
1896.........	42,425	320,563	320,444	11,368	28,178	9,405	56,591
1897.........	9,065	324,743	390,615	14,173	25,161	8,483	44,674
1898.........	5,578	207,647	437,861	12,286	17,502	16,127	23,182
1899.........	11,625	197,732	204,004	2,907	24,037	923	18,460
1900.........	10,968	137,800	163,509	4,035	41,055	3,538	14,815

* Fiscal.

† Apples, meal, all kinds, pease, potatoes.

SESSIONAL PAPER No. 20

Down through the Welland Canal, during a period of thirty years, ended Dec. 31, 1900.

	HEAVY GOODS.						
Total.	Railway Iron.	Other Iron.	Salt.	Iron and salt having paid full tolls on St. Lawrence Canals.	Coal.	Ores.	Total.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
503,860	68,064	16,924	91,575	37,153	103,126	58,781	275,623
538,147	26,217	17,141	50,540	44,243	186,932	98,605	3,678
579,880	6,923	20,754	40,850	17,157	339,016	118,685	543,387
647,397	6,032	12,068	23,309	9,579	323,503	56,825	431,316
417,936	1,517	7,588	13,509	9,962	321,306	43,683	397,565
409,788	51	7,997	30,300	20,327	288,211	81,654	378,540
464,181	9,630	9,696	9,173	3,988	323,869	42,758	399,109
403,403	10	11,518	3,980	12,686	295,318	15,229	338,741
438,564	2,782	5,797	7,174	17,796	192,957	19,164	245,670
442,182	5,360	4,812	413	22,273	109,986	34,139	176,983
269,395	4,585	7,013	10	30,682	128,113	18,785	189,188
306,482	....	5,348	50	17,327	237,559	23,700	283,984
373,326	1,237	7,922	66	17,037	307,058	31,785	365,105
305,734	698	652	461	3,242	274,471	53,205	332,729
273,905	78	2,055	597	14,243	248,272	26,728	291,973
414,812	166	6,123	48	12,324	271,356	27,447	317,464
394,971	1,351	5,636	....	6,715	145,193	13,866	172,761
419,786	93	3,220	316	13,617	223,871	16,872	257,989
542,043	47	2,479	1,254	20,269	268,305	2,435	294,789
519,291	....	753	1,027	28,047	202,384	8,138	240,349
367,177	127	1,610	2,567	7,953	224,644	3,415	240,316
527,426	163	1,567	878	3,666	211,616	355	218,245
805,253	6	2,075	374	8,139	233,096	....	243,690
591,409	....	3,072	159	977	203,608	....	207,816
486,421	185	6,245	54	2,819	158,866	1,140	169,309
788,974	1,192	6,332	82	3,264	223,445	1,158	235,473
816,914	7,206	17,012	227	590	176,226	....	201,261
720,183	1,444	11,722	799	734	162,336	13,438	190,468
459,688	567	6,361	1,282	1,318	97,732	26,125	133,385
375,720	....	8,190	533	4,800	47,392	58,400	119,315

E.—Table showing the tonnages of the undermentioned Articles Cleared at Buffalo and Tonawanda, for transit through the Erie Canal, for a series of thirty-two years.

VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles *	Total.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		
1869	5,609	490,904	219,874	1,978	63,728	2,150	2,193	786,436	....	....
1870	8,258	502,158	165,577	19,944	89,156	10,593	6,906	802,592	2·05	.....
1871	5,607	570,849	579,709	19,810	106,391	27,622	5,705	1,315,693	67·59	.....
1872	....	330,032	866,169	41,515	73,572	5,900	88	1,317,276	67·50	....
1873	6	737,167	611,675	8,636	51,615	22,441	634	1,432,174	82·10	.....
1874	....	650,161	459,728	3,192	44,079	112	237	1,157,509	47·18	......
1875	5,859	695,315	273,006	1,156	36,609	2,242	3,372	1,017,559	29·38	......
1876	231	377,317	356,064	6,334	24,488	12,205	4,691	783,381	....	0·39
1877	1,710	398,416	709,723	26,351	52,559	27,365	4,976	1,223,100	55·52	....
1878	987	775,953	718,714	21,665	69,256	51,064	6,662	1,644,301	109·08	...
1879	1,239	892,404	602,171	7,193	14,537	40,471	7,528	1,565,543	99·07	.....
1880	2,743	897,603	131,857	434	16,154	12,137	4,256	2,065,184	162·06	......
1881	1,491	386,605	458,318	86	24,751	107	7,484	878,842	11·75	......
1882	1,123	586,019	241,406	1,858	9,046	19,158	6,216	864,826	9·96	......
1883	538	535,150	517,219	6,816	47,190	79,010	6,051	1,191,974	51·06	......
1884	520	767,784	194,368	4,910	47,060	57,856	4,411	1,078,909	37·18	....
1885	323	540,533	356,737	3,317	5,610	6,405	5,427	918,352	14·36	.....
1886	488	955,851	351,272	6,799	5,180	....	4,001	1,353,591	72·11	......
1887	334	914,152	438,069	15,207	32,907	4,612	44,693	1,449,984	85·64	......
1888	534	469,965	494.110	6,589	68,922	10,997	1,717	1,052,834	33·87	......
1889	845	457,922	579,526	16,380	61,175	34,167	5,160	1,155,175	46·88	.....
1890	195	329,531	498,641	58,563	45,202	16,903	4,362	953,397	21·23	.....
1891	1,071	733,967	137,679	43,779	14,803	66,278	2,594	1,000,171	27·18	..
1892	2,485	611,177	141,506	37,570	70,363	3,997	3,472	870.570	10·69	.....
1893	424	1,086,834	240,767	38,986	21,981	6,156	243	1,395,391	77·43	......
1894	327	887,908	265,947	69,707	99,898	5,191	2,123	1.331,101	69·26	.....
1895	98	271,957	83,611	71,185	85,507	205	15	508,596	....	35·32
1896	6,971	402,114	89,726	101,154	194,442	77,162	5,575	877,144	11·53	....
1897	1,665	168,870	303,761	88,293	48,591	65,490	11,965	688,635	....	12 44
1898	....	64,760	354,917	85,359	74,336	7,367	20,818	607,557	....	22·74
1899	....	271,848	84,370	72,892	92,919	5,839	....	527,868	....	13 12
1900	620	129,683	184,996	58,472	33,564	10,478	25,621	438,434	....	20 39

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* Apples, meals all kinds, pease, potatoes.

Statement to Table E showing the shipment at Oswego during the same period.

VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles *	Total.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		
1869	7,361	141,360	28,585	66,794	1,113	8,569	14,033	267,815	..	.....
1870	11,440	115,732	10,120	77,906	3,953	7,402	11,628	238,181	...	11·06
1871	10,043	123,173	70,218	72,675	1,806	6,250	13,259	297,424	11·05	.....
1872	4,773	57,865	27,148	62,172	684	6,751	10,425	169,818	....	36·59
1873	4,061	53,361	10,578	46,337	670	6,019	10,739	131,765	......	50·80
1874	....	108,288	46,127	77,007	1,103	7,053	3,747	243,325	......	9·14
1875	1,728	32,690	3,034	75,083	3,308	4,989	5,931	126,763	......	52·67
1876	967	21,890	1,324	63,336	117	5.703	6,638	99,975	.....	62·67
1877	855	28,955	3,308	80,306	316	6,603	6,556	126,899	......	52·61
1878	1,394	24,171	1,383	50,381	....	10,598	5,222	93,149	......	65·21
1879	734	25,740	9,268	71,693	....	16,623	3,110	127,168	......	52·51
1880	951	17,466	15,656	82,743	....	12,598	5,996	135,410	......	49·43
1881	758	25,352	8,064	62,793	200	14,444	4,027	115,638	......	56·82
1882	813	20,274	4,401	70,862	416	22,265	7,773	126,804	......	52·65
1883	432	22,634	535	32,557	....	14,384	1,967	72,507	......	73·00
1884	404	5,932	413	48,391	....	12,173	2,819	70,132	......	73·43
1885	519	6,484	22	45,264	....	4,613	2,945	59,847	.....	77·62
1886	737	9,579	154	42,261	....	1,671	4,814	59,216	...	77·88
1887	790	675	2	44,580	.....	716	1,370	48,133	......	82·02
1888	384	2,206	168	6,237	....	....	2,196	11,191	.....	95·82
1889	473	8,002	8,950	40,096	16	1,405	1,003	59,945	......	77·61
1890	545	10,378	10,408	26,639	8	4,635	2,356	54,969	......	79·47
1891	292	4,298	1,652	27,418	....	2,130	3,620	39,410	....	85·28
1892	273	4,806	5,657	5,283	.....	199	2,340	18,558	.....	93·07
1893	119	2,036	3,968	8,476	....	237	2,784	17,620	.....	93·43
1894	8	10,293	10,514	17,160	....	....	2,609	40,584	......	84·84
1895	66	3,073	7,352	1,900	1,816	....	258	14,465	......	94·23
1896	....	1,825	7,778	7,552	....	....	2,468	19,623	...	93·01
1897	....	6,588	5,550	7,349	498	219	245	20,449	......	92·37
1898	160	2,111	5,886	1,450	16	....	784	10,407	.....	96·12
1899	216	3,106	4,478	2,400	....	....	2,346	12,546	20·56	.....
1900	214	485	1,404	2,400	....	....	403	4,906	......	64·22

* Apples, meal all kinds, potatoes.

F.—TABLE showing the Total Way and Through Tonnage of the undermentioned Articles cleared downward on the Welland Canal, during a series of Thirty Years, ended December 31, 1900.

VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles. †	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869*	44,110	310,090	119,541	3,920	....	680	1,541	479,882
1872	26,648	231,056	254,534	693	7,594	64	2,300	524,889
1873	30,660	345,720	180,042	643	1,188	3	3,557	563,813
1874	24,017	406,157	181,128	377	5,953	....	3,301	620,933
1875	13,930	248,555	103,477	813	3,383	500	4,304	374,962
1876	15,735	194,559	144,501	1,110	24,496	1,454	2,949	384,807
1877	13,588	248,894	169,185	10,216	2,810	2,405	1,833	448,931
1878	8,854	188,106	185,931	1,217	3,088	....	2,100	389,296
1879	10,588	271,545	114,276	803	1,196	....	2,387	430,795
1880	12,467	240,601	162,891	....	477	....	1,418	417,853
1881	9,655	121,393	103,075	252	....	6	1,371	235,752
1882	12,205	205,876	54,797	537	....	1,954	225	275,594
1883	13,256	146,741	182,143	975	731	518	10,971	355,335
1884	13,626	135,804	118,811	270	10,746	477	9,018	288,752
1885	13,322	114,090	117,536	618	1,116	....	1,628	248,310
1886	19,418	146,151	218,897	....	4,891	....	14,581	403,928
1887	23,940	210,755	114,938	1,711	12,050	....	12,149	375,543
1888	16,973	150,833	194,886	555	26,629	811	13,358	404,045
1889	7,922	120,498	353,595	197	28,356	1,918	18,273	530,759
1890	14,461	114,924	327,394	6,519	27,728	1,121	20,836	512,983
1891	13,517	196,326	185,177	8,113	52,959	65,071	27,895	549,058
1892	17,046	229,569	192,548	6,433	37,173	9,392	32,548	524,709
1893	15,232	257,203	441,092	18,461	31,283	3,671	36,981	803,923
1894	33,628	270,514	169,233	28,353	27,962	....	60,587	590,277
1895	43,895	202,636	164,894	8,689	18,236	....	46,435	484,785
1896	42,159	319,388	320,444	11,368	28,178	8,970	54,031	784,538
1897	9,025	322,993	390,615	14,173	25,127	8,483	44,651	815,067
1898	5,578	206,313	437,849	12,286	17,491	16,127	23,170	718,814
1899	11,625	197,732	204,004	2,424	23,541	923	18,440	458,689
1900	10,968	137,800	163,509	3,449	40,256	3,538	14,802	374,322

* Fiscal. † Apples, meal all kinds, pease, potatoes.

G.—TABLE showing the Tonnage of the undermentioned Articles passed through the Welland Canal in transit between Ports in the United States during a series of Thirty Years, ended December 31, 1900.

Year.	Vegetable Food.								Heavy Goods.					
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles.	Total.	Railway Iron.	Other Iron.	Salt.	Coal.	Ores.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869	30,681	211,085	91,149	2,942	....	667	1,006	337,530	68,064	14,334	89,086	28,566	35,912	235,962
1872	10,482	124,695	89,761	1,391	7,400	....	608	234,337	24,040	13,239	49,843	95,741	59,401	242,264
1873	10,805	127,727	101,329	1,920	1,188	3	392	243,366	4,659	13,826	40,507	170,242	62,942	292,176
1874	8.230	229,053	125,627	....	5,948	....	5,368	374,226	5,742	8,941	22,888	203,673	19,651	260,895
1875	1,881	113,832	54,188	2,641	2,946	500	1,920	177,908	14	4,123	12,931	192,767	34,616	244,451
1876	5,187	96,247	58,138	....	1,905	525	403	162,405	....	5,531	29,395	167,110	25,808	227,844
1877	3,342	107,396	65,260	1,603	2,314	258	413	180,586	8,976	8,688	8,336	172,868	41,107	239,975
1878	1,316	65,542	60,026	859	277	....	341	128,361	....	10,713	3,892	150,583	13,535	178,723
1879	159	53,791	33,401	....	464	....	11	87,826	2,405	3,648	6,318	118,573	17,797	148,741
1880	....	30,611	16,122	1,551	296	....	....	48,580	4,743	3,515	371	65,945	18,380	92,954
1881	....	34,320	30,031	924	....	....	10	65,285	1,313	5,570	....	83,858	6,464	97,205
1882	107	30,227	32,433	537	....	684	14	64,002	....	4,076	....	158,552	14,533	177,161
1883	2,041	54,382	66,128	735	731	....	8,579	132,496	1,209	6,901	8	196,462	24,891	229,471
1884	1,715	40,956	53,707	....	9,874	....	8,170	114,422	698	599	....	210,790	15,100	227,187
1885	124	53,235	63,229	732	882	....	1	118,203	....	1,594	....	198,416	15,029	215,039
1886	7,591	53,258	94,048	....	4,790	....	13,201	172,888	156	5,328	1	189,964	11,364	206,813
1887	11,780	37,678	83,431	1,732	12,050	....	10,859	157,530	15	4,406	....	82,780	627	87,828
1888	8,563	39,999	102,974	2	26,510	179	11,598	189,825	63	1,601	56	173,259	2,309	177,288
1889	5,017	39,229	147,045	....	27,492	....	17,225	236,208	....	1,587	896	227,476	1,204	231,163
1890	9,204	31,527	180,842	6,519	27,030	....	20,497	275,619	....	504	208	162,231	1,620	164,563
1891	6,802	32,097	127,494	8,113	52,823	....	26,115	253,444	....	292	705	186,572	1,773	189,342
1892	11,018	26,950	131,222	6,433	36,935	....	31,992	244,550	....	576	2	183,895	....	184,473
1893	6,588	28,187	198,777	16,751	23,870	864	36,352	311,389	....	344	....	206,827	....	207,171
1894	17,795	53,846	10,539	28,095	27,621	....	60,462	198,358	....	297	....	188,521	....	188,818
1895	10,169	27,881	100,512	7,904	17,020	....	46,316	209,802	181	246	....	149,490	....	149,917
1896	16,224	34,878	175,094	11,128	16,137	490	46,456	300,407	....	146	....	207,348	....	207,494
1897	7,237	28,919	169,057	14,173	14,969	....	41,887	276,242	965	15	....	165,143	....	166,123
1898	4,212	11,268	150,667	6,909	12,732	1,197	22,671	209,656	770	339	4	156,814	....	157,927
1899	6,118	12,926	81,777	2,424	19,526	923	18,198	141,892	351	1,646	553	88,931	....	91,481
1900	7,966	18,771	60,545	2,402	39,706	2,149	14,248	145,787	....	953	....	46,024	....	46,977

Apples, meals all kinds, pease, potatoes.

H.—Table showing the Tonnage of Vegetable Food carried on each of the Lines of Canals and the two principal Railways, competing for the Carrying Trade between Lake Erie and Tidewater, for a series of Thirty years, ended December 31, 1900.

Year.	Total on New York Canals.	Total on Welland Canal.	Total on New York Central and Erie Railways.	Quantity charged at Buffalo and Tonawanda by Erie Canal.	Quantity cleared at Oswego by Canal.	Quantity cleared through the Welland Canal in transit between ports, in the United States.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869*	1,302,613	503,860	1,087,809	786,436	267,815	337,530
1872	1,674,320	538,147	1,870,614	1,317,276	169,818	234,337
1873	1,745,171	579,880	2,036,992	1,432,174	131,765	243,366
1874	1,767,598	647,397	2,791,517	1,557,509	243,325	374,226
1875	1,305,550	417,936	2,343,241	1,017,559	126,763	177,908
1876	1,064,293	409,788	2,875,803	783,331	99,975	162,405
1877	1,498,984	464,181	2,493,683	1,223,100	126,899	180,586
1878	1,912,734	403,403	3,095,764	1,644,301	93,149	128,361
1879	1,833,399	438,564	4,353,617	1,565,543	127,168	87,826
1880	2,371,090	442,182	4,732,385	2,065,184	135,410	48,580
1881	1,116,561	269,395	4,983,722	878,842	115,638	65,285
1882	1,118,776	306,482	3,885,557	864,826	126,804	64,002
1883	1,379,000	372,236	4,422,461	1,191,974	72,507	132,496
1884	1,236,986	305,734	3,639,805	1,078,909	70,132	114,422
1885	1,063,310	273,905	4,105,594	918,352	59,847	118,203
1886	1,489,886	414,812	3.802,262	1,353,591	59.216	172.888
1887	1,552,764	394,971	3,847,766	1,449,984	48,133	157,530
1888	1,166,958	419,786	3,197,734	1,052,834	11,191	189,825
1889	1,296,896	542,043	3,654,984	1,155,175	59,945	236,208
1890	1,167,901	519,291	4,336,199	953,397	54,969	275,619
1891	1,092,355	367,177	3,565,381	1,000,171	39,410	253,444
1892	937,999	527,426	5,913,013	870,570	18,558	244,550
1893	1,452,563	805,253	5,107,426	1,395,391	17,620	311,389
1894	1,400,129	591,409	4,281,056	1,331,101	40,584	293,148
1895	602,505	486,421	3,798,574	508,596	14,465	209,802
1896	957,182	788,974	5,183,540	877,144	19,623	300,407
1897	744,575	816,914	5,673.638	688,635	20,449	276,242
1898	653,027	720,183	7,060,542	607,557	10,407	209,656
1899	577,486	459,688	6,211,827	527,868	12,546	141,892
1900	472,857	375,720	6,053,005	438,434	4,906	145,787

* Fiscal.

I.—STATEMENT showing the Quantity of Through Freight passed DOWN the Welland Canal in Canadian and United States Vessels entering the Canal at Port Colborne during the season of Navigation in 1889, 1890, 1891, 1892, 1893, 1894, 1895 ,1896, 1897, 1898, 1899 and 1900.

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	317	106,048	427	118,071	208	172,873	268	92,442	1220	489,434
1889.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		38,127		28,054		1,679		46,767		114,627
Corn		60,218		42,819		152,858		96,700		353,595
Barley										
Oats		320				25,347		2,145		27,812
Pease										
Rye		948		634		336				1,918
Coal		3,976		21,148		712		1,664		27,500
Miscellaneous merchandise		6,339		5,749		25,082		3,030		40,200
Shingles, woodenware, &c.				1				51		52
Sawed lumber ... Ft. B.M.		5,789,226		11,632,330		11,792,850		21,026,211		50,240,617
Square timber ... Cub. ft.		924,645		2,934,989						3,859,634
Staves ... No.		35,700		174,649						220,349
Firewood ... Cords.				46						46
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	342	110,056	443	117,400	202	204,542	142	50,622	1129	482,620
1890.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		43,308		35,633		7,514		32,239		118,694
Corn		63,095		51,439		172,756		40,104		327,394
Barley						3,304		3,215		6,519
Oats		479		73		27,030				27,582
Pease						14				14
Rye		1,121								1,121
Coal		1,049		21,732				615		23,396
Miscellaneous merchandise		3,146		5,683		32,194		2,510		43,533
Shingles, woodenware, &c.		15		1,266		8				1,289
Sawed lumber ... Ft. B.M.		5,921,240		5,167,201		10,274,335		14,290,800		35,653,576
Square timber ... Cub. ft.		1,141,194		3,395,832						4,537,026
Staves ... No.		12,255		19,947						32,202
Firewood ... Cords.		15		566						581
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	256	107,575	173	68,061	241	241,317	130	50,063	800	467,016
1891.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		62,859		56,953		36,425		33,853		190,090
Corn		20,510		9,550		137,852		17,039		184,951
Barley						5,444		4,061		9,505
Oats						50,212		1,076		51,288
Pease		390								390
Rye		29,581		11,296		16,361		7,343		64,581
Coal		158		20,388				3,851		24,397
Miscellaneous merchandise		8,369		6,007		37,537		2,578		54,491
Shingles, woodenware, &c.								4		4
Sawed lumber ... Ft. B.M.		4,268,874		4,648,824		8,067,351		18,745,628		35,730,677
Square timber ... Cub. ft.		449,406		566,109						1,015,515
Staves ... No.		1,000								1,000
Firewood ... Cords.										

I.—STATEMENT showing the Quantity of Freight passed DOWN the Welland Canal in Canadian and United States Vessels, &c.—*Continued.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage	No.	Tonnage.	No.	Tonnage.
	239	100,324	186	73,140	245	248,837	134	52,087	804	474,388
1892.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		74,578		54,764		60,364		36,898		226,604
Corn		17,477		7,369		146,080		21,631		192,548
Barley						3,995		2,438		6,433
Oats						36,935				36,935
Pease		524								524
Rye		5,066				3,718		608		9,392
Coal		775		13,350				1,365		15,490
Miscellaneous merchandise		2,139		2,786		44,117				49,042
Shingles, woodenware, &c.		1				45		9		55
Sawed lumber ...... Ft. B.M.		6,278,253		7,504,256		10,494,692		26,832,564		51,109,765
Square timber ...... Cub. ft.		754,213		1,421,260		2,601		1,810		2,179,384
Staves ...... No.		46,800		32,838						79,638
Firewood ...... Cords.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	193	100,107	143	58,652	390	375,682	236	122,326	962	656,767
1893.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		83,447		31,185		72,671		68,628		255,931
Corn		23,817		12,946		313,246		91,083		441,092
Barley		1,527		183		16,189		562		18,461
Oats		223				27,903		3,038		31,164
Pease										
Rye						3,216		455		3,671
Coal		638		13,580				5,849		20,067
Miscellaneous merchandise		6,179		286		44,976		1,647		53,088
Shingles, woodenware, &c.				15		22				37
Sawed lumber ...... Ft. B.M.		13,750,267		2,748,941		17,359,573		41,863,852		75,722,633
Square timber ...... Cub. ft.		836,048		1,437,893		5,133				2,279,074
Staves ...... No.				18,484						18,484
Firewood ...... Cords.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	242	86,838	339	93,450	114	104,505	219	60,500	914	345,293
1894.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		95,586		54,444		79,715		37,095		260,840
Corn		10,368		5,614		122,211		31,040		169,233
Barley		258				28,095				28,353
Oats		175		107		27,621				27,903
Pease										
Rye										
Coal		1,483		1,892		61		11,109		14,545
Miscellaneous merchandise		16,949		664		83,198		1,977		102,788
Shingles, woodenware, &c.		22								22
Sawed lumber ...... Ft. B.M.		8,423,295		279,830		11,719,664		31,891,456		52,313,745
Square timber ...... Cub. ft.		771,528		1,578,981						2,350,509
Staves ...... No.										
Firewood ...... Cords.										

I.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—*Continued.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage
	209	108,776	151	73,895	205	223,743	101	41,327	666	447,741
1895.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		72,895		68,935		29,345		30,723		201,898
Corn		16,854		3,724		126,943		17,369		164,890
Barley		798		162		7,729				8,689
Oats		1,531		246		16,442				18,219
Pease										
Rye										
Coal		2		3,984				4,426		8,412
Miscellaneous merchandise		37,356		2,361		67,705		1,324		108,746
Shingles, woodenware, &c		20				863		1,079		1,962
Sawed lumber.....Ft. B.M.		1,057,146		248,071		9,385,890		14,929,734		25,620,841
Square lumber ......Cub. ft.		1,027,913		2,049,368				35,000		3,112,281
Staves.....No.										
Firewood.....Cords										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	224	122,521	181	82,543	343	337,983	163	96,506	911	639,553
1896.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		113,331		90,979		78,741		34,476		317,527
Corn		9,360		3,855		218,315		88,914		320,440
Barley		240				11,128				11,368
Oats		441		1,270		24,847		1,620		28,178
Pease		1,403		1,354				273		3,030
Rye		5,035		644		2,837		454		8,970
Coal		7		11,106		1,255		629		11,997
Miscellaneous merchandise		29,820		1,452		82,319		4,374		117,965
Shingles, woodenware, &c		134				22				156
Sawed lumber.....Ft. B.M.		2,123,213				18,259,810		27,796,146		48,179,169
Square timber.....Cub. ft.		942,923		1,649,145				246,024		2,838,092
Staves.....No.										
Firewood.....Cords.								55		55
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	225	131,907	163	76,760	388	382,231	144	86,675	920	677,573
1897.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		121,762		55,724		106,064		37.891		321,441
Corn		33,694		15,244		274,355		66,822		390,615
Barley						14,173				14,173
Oats		223				23,515		1,168		24,906
Pease		1,851								1,851
Rye		2,047		919		5,517				8,483
Coal		3,873		3,947		368		1,615		9,803
Misellaneous merchandise		15,739		3,290		70,968		4,174		94,071
Shingles, woodenware, &c		1,268		5		404				1,677
Sawed lumber.....Ft. B.M.		1,573,447				20,284,446		20,673,202		42,531,095
Square timber.....Cub. ft.		1,327,823		2,217,629				616,093		4,161,545
Staves.....No.		2,577,160								2,577,160
Firewood.....Cords.		4								4

I.—STATEMENT showing the Quantity of Through Freight passed DOWN the Welland Canal in Canadian and United States Vessels, &c.—*Concluded.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	126,398	104	59.532	354	355,702	195	108,720	869	650,352
1898.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		95,567		36,157		54,934		18,355		205,013
Corn		56,538		30,455		284,059		66,761		437,813
Barley						9,465		2,821		12,286
Oats						17,329				17,329
Pease		260				45				305
Rye		3,564		1,480		9,135		1,948		16,127
Coal		575		1,916		759		2,620		5,870
Miscellaneous merchandise		19,385		4,104		47,271		8,758		79,518
Shingles, woodenware, &c.		2		9						11
Sawed lumber . . . Ft. B.M.		4,910,669		1,641,783		16,220,972		24,484,283		47,257,707
Square timber . . . Cub. ft.		825,545		1,183,821				388,410		2,397,776
Staves . . . No.										
Firewood . . . Cords.		249								249
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	191	100,242	129	75,777	201	212,027	78	36,962	599	425,008
1899.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		91,901		80,928		16,250		7,244		196,323
Corn		28,015		18,905		138,834		18,250		204,004
Barley						2,424				2,424
Oats		1,557				21,646				23,203
Pease										
Rye						923				923
Coal		435		6,736				3,398		10,569
Miscellaneous merchandise		25,203		18,651		49,522		1,567		94,943
Shingles, woodenware, &c.		485		916				100		1,501
Sawed lumber . . . Ft. B.M.		2,077,748		772,739		14,855,338		19,949,079		37,654,904
Square timber . . . Cub. ft.		322,138		585,780		20,802		328,806		1,257,526
Firewood . . . Cords.				9						9
Staves . . . No.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	114,885	109	67,475	168	182,444	71	30,309	564	395,113
1900.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		67,694		43,157		23,066		2,130		136,047
Corn		39,597		31,248		78,701		13,963		163,509
Barley						2,402		1,047		3,449
Oats						39,706		407		40,113
Pease		115				4				119
Rye		1,389				2,149				3,538
Coal		723		637		433		559		2,352
Miscellaneous merchandise		53,649		31,536		43,344		3,564		132,093
Shingles, woodenware, &c.		1,078								1,078
Sawed lumber . . . Ft. B.M.		6,847,279		5,344,258		14,984,483		18,770,405		45,946,425
Square timber . . . Cub. ft.		439,827		355,951		11,583		198,420		1,005,781
Firewood . . . Cords.		126		255						381
Staves . . . No.		1,000								1,000

STATEMENT showing the Quantity of THROUGH Freight passed up the Welland Canal in Canadian and United States Vessels during the Season of 1900.

Articles.	Canadian Vessels.				United States Vessels.				Total.	
	Steam.		Sail.		Steam.		Sail.		Steam & Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	119,754	115	68,277	160	175,099	72	33,877	563	397,007
1900.		Tons.		Tons.		Tons.		Tons.		Tons.
Class 3.										
Cement and Water-Lime		1,935				112				2,047
Fish		8				342				350
Iron railway		74								74
" pig		3								3
" all other		1,458		7		239				1,704
Salt		49								49
Steel						122				122
Articles not enumerated		649		1,215		1,192				3,506
Class 4.										
Crockery and earthenware		16								16
Marble						863				863
Manilla						174				174
Nails		183								183
Paint		32		6						38
Pitch and tar		23								23
Sugar		442				13,175				13,617
Tin		117								117
Merchandise not enumerated		2,127		4		38,192				40,323
Class 5.										
Produce of wood		1,348		12		86				1,446
Special Class.										
Coal		2,416				24,244		18,380		45,040
Unenumerated articles										
Total		10,880		1,244		78,741		18,380		109,245

	Tons.
Canadian Steam Vessels carried	10,880
" Sailing "	1,244
United States Steam "	78,741
" Sailing "	18,380

WELLAND CANAL THROUGH FREIGHT RECAPITULATION.

WELLAND CANAL—WEST BOUND FREIGHT.

The total quantity of Through Freight passed Up the Welland Canal in Canadian and United States Vessels, during the Season of Navigation in 1900, is as follows:—

Summary.	Tons.	Tons.
In Canadian steam vessels	10,880	
" sail "	1,244	
Total quantity in Canadian vessels		12,124
In United States steam vessels	78,741	
" sail "	18,380	
Total in United States vessels		97,121
Grand total freight passed up the Welland Canal in Canadian and United States vessels		109,245

STATEMENT of the Quantity of Through Freight passed Up and Down, on the Welland Canal during the Season of Navigation in 1900.

Summary.	Tons.	Tons.
In Canadian steam vessels up	10,880	
" " down	183,997	
Total in Canadian steam vessels		194,877
In Canadian sail vessels up	1,244	
" " down	123,376	
Total in Canadian sail vessels		124,620
Total quantity in Canadian vessels		319,497
In United States steam vessels up	78,741	
" " down	215,021	
Total in United States steam vessels		293,762
In United States sail vessels up	18,380	
" " down	56,918	
Total in United States sail vessels		75,298
Total quantity in United States vessels		369,060
Total in Canadian and United States vessels		688,557
	Down or East bound.	Up or West bound.
In Canadian vessels	307,373	12,124
In United States vessels	271,939	97,121
Total	579,312	109,245

Crockery	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	19	34	94 5	133	73	55	25

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K.—STATEMENT showing the Quantity of freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence Canals, to Montreal, during the Seasons of Navigation in 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899 and 1900.

Articles.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 3.													
Cement and water lime									12				
Clay, lime and sand										38	52	15	15
Iron, pig				371			195	79	5				508
" all other	418						1	1,766	2,020	7,564	6,217	5,063	4,292
Steel								394	542	375	1,351	3,000	5,420
Stone for cutting									200				
Apples					54		50	28	1,263				
Barley						600	258	959	240		3,960	596	1,288
Corn	66,443	195,350	139,798	52,539	53,689	278,564	60,661	70,235	182,330	267,533	310,498	150,999	109,359
Flaxseed										3,293	5,687		
Flour	3,865	6,841	3,065	3,324	2.874	5,514	16,503	30,916	11,964	1,029	653	4,229	1,595
Meal, all kinds	100	148	222	67	16		4	65					
Oats		320	479			9,761	175	1,654	12,373	6,847	3,975	10,250	8,925
Pease				390	524				3,020	2,078	260		115
Rye		1,284	1,120	64,978	9,119	3,669			8,323	8,435	15,488	923	3,078
Salt										216	144	183	
Seeds, all kinds	12	3	2	2	75				20			200	
Tobacco, raw				1						51			
Wheat	93,915	70,815	75,515	159,785	194,281	209,212	212,557	158,643	255,198	278,498	184,154	169,978	121,896
All other, agricultural products, vegetable		798	3	2			29		29		56	32	
Hides, skins, horns and hoofs					20								
Horses	2	2	3	2	2	1	1	1	1	1	4	1	
Lard and lard oil	54			100									
Pork	265	1,220	221	201			717		1				
All other agricultural products, Animal	39	32	117		103								
Total, Class 3	165,113	276,813	220,545	281,762	260,757	507,321	201,151	264,740	477,541	576,008	532,499	345,469	256,491
Class 4.													
Agricultural Implements												3	
Ashes	85	107	70	40	17	23	19	34	94	133	73	55	25
Crockery									5				

K.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence Canals, to Montreal, &c.—*Concluded.*

Articles.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 4—Con.													
Furniture	2	....	1	2	1	....	2	....	....	1	....	....	1
Glass, all kinds	3	....	1	1	....	....	....	....	9	53	75	16	6
Molasses	....	....	....	....	....	....	....	100	167	9	56	159	....
Nails	....	....	....	....	....	....	....	....	....	....	....	1	....
Oil	....	4	6	....	....	....	....	6	23	112	1,141	7,143	15,647
Paint	....	....	....	....	....	....	....	2	....	....	....	....	....
Pitch and tar	....	....	....	....	....	....	....	....	....	....	....	....	....
Rags	....	....	....	....	....	....	....	....	4	....	....	....	....
Sugar	....	....	....	....	....	....	....	....	1	....	....	....	....
Stone, wrought	....	....	....	....	....	....	....	....	....	....	....	....	....
Tobacco	....	....	....	....	....	....	....	....	....	....	....	96	....
White lead	....	....	....	....	....	....	....	....	....	....	....	....	16
Whisky, beer, and other spirits	3	20	26	105	6	1	....	101	....	46	4	74	11
Merchandise, not enumerated	105	193	142	278	36	4	330	558	376	1,226	866	518	92
Total, Class 4	198	324	246	426	60	28	351	801	679	1,580	2,215	8,065	15,798
Class 5.													
Barrels, empty	40	....	....	....	1	....	....	1	....	....	....	1	182
Hoops	....	....	....	....	....	....	....	....	....	257	....	....	....
Sawed lumber	5,175	6,118	3,579	3,908	1,678	667	683	1,117	657	478	3,065	924	15,760
Staves, pipe and barrel	139	....	....	....	8	....	....	....	....	4,716	....	....	....
" West India and pipe	1,623	270	....	....	200	....	....	....	....	....	....	....	....
Timber, square, in vessels	....	....	....	....	....	....	....	....	....	....	....	....	....
" in rafts	11,586	9,302	....	5,680	400	....	....	....	1,200	1,207	329	26	....
Woodenware	25	....	1	....	....	....	6	....	....	....	....	....	....
Total, Class 5	18,588	15,690	3,580	9,588	2,327	667	689	1,118	1,857	6,658	3,394	951	15,942
Special Class.													
Coal	....	....	....	....	....	....	....	....	....	....	....	....	....
Grand total	183,899	292,827	224,371	291,776	263,144	508,016	292,191	266,659	480,077	584,246	538,108	354,485	288,231

L.—STATEMENT showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland Canal to Lake Erie, during the Seasons of Navigation in 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899 and 1900.

Articles.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 3.													
Bricks	187	84	252	469			1	24	15	70	70	24	49
Cement and water lime	1,177	823	62	2,380	1,570	3,169	2,281	1,859	1,686	837	996	997	1,931
Clay, lime and sand	95	3	8	206	240		253			4	144	8	4
Fish	1	80	26	7	426	465	512		11	10	9	10	8
Gypsum												4	
Iron, railway	9,148	15,513	20,003	2,855	1,171	6,576	20		1,687				74
" pig	573	250	20	112	74	25		56	28	6			3
" all other	297	290	584	595	387	543	114	1,831	727	559	699	1,318	1,428
Salt	3,599	4,216	7,440	4,391	2,034	995	843	932	822	25	35		48
Steel	3	3	1		269	426	248	528			19	18	
Stone for cutting			12		145				4	62			
Flour			48			3							
Hay								124					
Meals	31						15						
Oats													
Potatoes													
Seeds, all kinds	24	215	100				33	25	99	121	56	121	218
Agricultural products not enumerated, vegetables	35	19		52			5	26		4			
Hides and skins								26					
Horses		2							1		1		
Lard and lard oil			72		16			1			2		
Pork			33										1
Wool			13	2	13								
All other articles not enumerated	77		1	2			10						
Total, class 3	15,247	21,498	28,675	11,071	6,345	12,202	4,335	5,432	5,080	1,698	2,031	2,500	3,764
Class 4.													
Ashes, pot and pearl			10	31	88					1			
Crockery and earthenware	336	112	11	251	8	98	107	12	83	4	33	3	5
Dye woods, &c													
Furniture	1			1	3					2			1

L.—STATEMENT showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland Canal to Lake Erie, &c.—*Concluded.*

Articles.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 4—Con.													
Glass, all kinds	77	71	23	30	152	365	175	394	612	799	150	299	456
Manilla	1	....	....	....	....	....	11	....	....	....	....	....	....
Molasses	7	56	....	....	32	43	42	20	1	....	....	....	....
Nails	578	736	453	560	276	472	500	1,149	409	129	229	518	180
Oil, in barrels	22	9	11	64	2	44	8	31	33	12	15	21	74
Paint	59	49	24	61	15	70	8	75	49	20	35	2	12
Pitch and tar	....	....	13	22	15	26	152	67	60	20	37	6	21
Rags	....	....	....	....	....	....	....	....	....	....	....	14	....
Resin	....	....	1	....	....	....	....	....	....	....	....	15	....
Soda, ash	1,196	766	554	377	352	68	94	84	74	249	88	108	69
Stone, wrought	....	....	....	....	....	14	....	....	17	25	31	....	....
Sugar	98	7	551	412	1,320	2,218	2,724	1,430	1,873	311	566	1,596	430
Tin	198	480	40	23	27	34	327	396	395	359	237	159	117
Turpentine	1	1	2	....	....	....	....	....	....	....	....	....	....
White lead	2	4	19	3	6	35	2	7	10	5	....	1	4
Whiting	....	33	34	50	71	31	1	113	56	104	93	89	39
Whisky, beer, &c	228	124	350	294	220	26	53	77	51	93	98	178	295
Merchandise, not enumerated	1,259	1,422	1,180	810	538	799	900	1,268	1,247	711	793	482	744
Total, class 4	4,063	3,870	3,276	2,989	3,125	4,343	5,104	5,123	4,970	2,844	2,405	3,491	2,447
Class 5.													
Barrels, empty	....	2	....	....	....	....	....	....	....	....	....	....	....
Lumber, sawn, in vessels	....	....	....	....	....	....	....	....	....	....	....	....	....
Woodenware	....	....	....	....	....	....	....	....	....	....	....	....	....
Total, class 5	....	2	....	....	....	....	....	....	....	....	....	....	....
Special Class.													
Coal	....	....	....	....	....	....	....	....	....	....	....	....	....
Grand total	19,310	25,370	31,951	14,060	9,470	16,545	9,439	10,555	10,050	4,542	4,436	5,991	6,211

M.—STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Season of Navigation from 1888 to 1900, inclusive.

Articles.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 3.													
Bricks			4							845			
Cement and water lime	4										300		18
Fish				1		5	5						
Iron, railway								181		965	770		
" all other		520	1	10	1	102		214			324	1,008	714
Salt				494								549	
Steel	3				1				498		2,951	13,522	3,110
Stone for cutting													
Apples													
Barley	2		6,519	8,113	6,433	16,751	28,095	7,904	11,128	14,173	6,909	2,424	2,402
Corn	102,974	147,045	180,842	127,494	131,222	198,777	105,329	100,512	175,094	169,057	150,667	81,777	60,545
Flour	8,563	5,017	9,204	6,802	11,018	6,588	17,795	10,169	16,224	7,237	4,212	6,118	7,966
Hay, pressed										301			
Meal, all kinds	11,598	17,224	20,482	26,096	31,724	36,352	60,390	46,316	46,456	41,644	22,626	18,198	14,244
Oil cake							29						2,705
Oats	26,510	27,492	27,030	52,823	36,935	23,870	27,621	16,442	16,137	14,969	12,729	19,526	39,706
Pease											45		4
Potatoes		1	1										
Rye	179					864			490		1,197	923	2,149
Flax seed												200	
Seeds, all kinds	48	151	135	256	50	16		14	78	299	44	11	
Wheat	39,999	39,229	31,527	32,097	26,950	28,187	53,846	27,881	34,878	28,919	11,268	12,926	18,771
Agricultural products, vegetables			14	42									6
Hides and skins, &c	39							8	41	23			
Horses		1	1	3		2	4		3	3	2		4
Lard and lard oil, &c	19	32	30	10		1		6	1,348	1,444	3,671	864	1,588
Meats, other than pork	14	3	15	2	29			30					
Pork	19	21	88	73	1	52	56	87	390	243	1,271	343	117
Sheep													
Tallow											359	201	631
Wool	18	452		1,237	70	80	1,484	1,536	900	197	89	130	
Total, class 3	189,989	237,188	275,893	255,553	244,434	311,647	294,654	211,300	303,665	280,319	219,434	158,720	154,680
Class 4.													
Agricultural implements													
Crockery and earthenware	1	1											
Furniture	30	30	21	7		6		2			2	7	

M.—STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Season of Navigation from 1888 to 1900, inclusive—*Concluded.*

Articles.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 4—Con.													
Glass, all kinds				1									
Molasses												8	57
Nails							57					11	
Oil, in barrels				1				30	1,005	198	119	367	17
Paint			3		44						3	2	36
Rags												1	
Soda, ash													
Stone, wrought		2											
Sugar								59	165	31			154
White lead			1										
Whisky, beer and all other spirits	151	190	228	167	46	83		15			34	168	1
Merchandise	1,453	1,679	1,822	1,865	1,331	1,693	2,976	7,656	3,990	3,591	3,828	6,219	7,880
Total, Class 4	1,635	1,902	2,075	2,041	1,421	1,782	3,033	7,762	5,160	3,820	3,986	6,783	8,161
Class 5.													
Empty barrels						9			10				5
Firewood in vessels									165				
Lumber, sawn, in vessels	28,333	55,074	38,030	45,504	54,173	68,985	62,905	41,974	75,515	68,280	52,844	57,695	55,128
Masts and spars, in vessels										403			
Hoops													
Railway ties, in vessels								446					
Shingles	6	51				13							
Staves, barrel	82												
Timber, square, in vessels								500		1,040			
Woodenware, &c.	141	333	8	4	54				12	1			
Total, Class 5	28,562	55,458	38,038	45,508	54,227	69,007	62,905	42,920	75,702	69,724	52,844	57,695	55,133
Special Class.													
Coal	878	1,124	615	1,382	651	2,123	727	603	1,255		759	2,293	992
Stone, not suitable for cutting		1,681	18										
Kryolite			1,620	1,773									
Total, Special Class	878	2,805	2,253	3,155	651	2,123	727	603	1,255		759	2,293	992
Grand total	221,064	297,353	318,259	306,257	300,733	384,559	361,319	262,585	385,782	353,863	277,023	225,491	218,969

N.—**Statement** showing the number of Vessels which took their Cargoes of Corn through the Welland Canal from ports west of Port Colborne, the quantity transhipped at Kingston and Prescott, and the quantity of each cargo through the St. Lawrence Canals to Montreal, during the Season of Navigation in 1900.

Name of Vessels.	Original quantity through the Welland Canal.	Quantity transhipped at Kingston and Prescott.	Cargo through the St. Lawrence Canals to Montreal
	Tons.	Tons.	Tons.
Canadian Steamer Arabian	1,199	517	682
" " "	1,204	263	941
" " Cuba	644	168	476
" " "	448	169	279
" " "	560		560
" " "	560		560
" " "	476		476
" " "	560		560
" " "	504		504
" " "	560		560
" " "	560		560
" " Melbourne	653	173	480
" " "	560		560
" " "	476		476
" " "	476		476
" " "	560		560
" " "	560		560
" " "	560		560
" " "	392		392
" " "	560		560
" Schooner Dunmore	1,187	260	927
" " Selkirk	1,463	371	1,092
Total	14,722	1,921	12,801

No. of cargoes of Corn	22
Quantity through Welland Canal to Kingston and Prescott	14,722 tons.
" taken to Montreal in vessels in which it arrived at Kingston and	
" transhipped at Kingston and Prescott	1,921 "
Prescott	12,801 "

N.—**Statement** showing the number of Vessels which took their Cargoes of Wheat through the Welland Canal from ports west of Port Colborne, the quantity transhipped at Kingston and Prescott, and the quantity of each Cargo through the St. Lawrence Canals to Montreal, during the Season of Navigation in 1900.

Name of Vessels.	Original quantity through the Welland Canal.	Quantity transhipped at Kingston and Prescott.	Cargo through the St. Lawrence Canals to Montreal
	Tons.	Tons.	Tons.
Canadian Steamer Arabian	1,231	520	711
" " "	1,230	229	1,001
Total	2,461	749	1,712

No. of cargoes of Wheat	2
Quantity through Welland Canal to Kingston and Prescott	2,461 tons.
" transhipped at Kingston and Prescott	749 "
" taken to Montreal in vessels in which it arrived at Kingston and Prescott	1,712

Recapitulation of the Number of Vessels passed **Down** the Welland Canal with Cargoes of Grain for Montreal, the Quantity transhipped at Kingston and Prescott, and the Quantity taken to Montreal for the Season of Navigation in 1900.

—	Number of Cargoes.	Total Number.
Wheat	2	
Corn	22	
Total		24
	Tons.	Tons.
Quantity of wheat through the Welland Canal, bound for Montreal	2,461	
" corn " " " "	14,722	
Total through Welland Canal		17,183
Quantity of the above, transhipped at Kingston and Prescott :—		
Wheat	749	
Corn	1,921	
Total transhipped		2,670
Quantity of the above Cargoes taken to Montreal in vessels in which it arrived at Kingston and Prescott :—		
Wheat	1,712	
Corn	12,801	
Total quantity to Montreal		14,513
Grand total		17,183

O. **Statement** showing the Quantity of Grain passed Down the Welland Canal to Kingston, Prescott, Ogdensburg and other Ports in Canadian and United States Vessels, entering the Canal at Port Colborne, during the Season of Navigation in 1900.

—	Canadian Vessels.				United States Vessels.				Total.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	114,885	109	67,475	168	182,444	71	30,309	564	395,113
		Tons.		Tons.		Tons.		Tons.		Tons.
Barley		...		...		2,402		1,047		3,449
Corn		39,597		31,248		78,701		13,963		163,509
Oats		...		...		39,706		407		40,113
Pease		115		...		4		...		119
Rye		1,389		...		2,149		...		3,538
Wheat		67,694		43,157		23,066		2,130		136,047
Total		108,795		74,405		146,028		17,547		346,775

		Tons.
216	Cargoes in Canadian Vessels Steam, total quantity	108,795
109	" " " Sail "	74,405
168	" in United States Vessels, Steam, total quantity	146,028
71	" " " Sail "	17,547

P.—Statement of the Quantity of Grain arrived at Kingston, Prescott and Ogdensburg in vessels which passed Down the Welland Canal during the season of navigation in 1900.

Summary.	Tons.	Tons.
Canadian steam vesseels—216 cargoes of grain	108,795	
" sail " 109 "	74,405	
Total in Canadian vessels	....	183,200
United States steam vessels—168 cargoes of grain	146,028	
" sail " 71 "	17,547	
Total in United States vessels	....	163,575
Total in Canadian and United States vessels	....	346,775
Distributed as follows:—		
24 Canadian vessels arrived at Kingston and Prescott, and discharged part of their cargoes, taking the balance to Montreal	....	14,513
540 vessels arrived at Kingston, Prescott, Ogdensburg and ports, and discharged all their cargoes as follows:—		
301 cargoes in Canadian vessels 166,017		
239 " United States vessels 163,575		
Quantity discharged by the 24 Canadian vessels, which took the balance to Montreal 2,670		
Total quantity discharged	332,262	
Total quantity of above transhipped from Kingston, Prescott and Ogdensburg to Montreal	....	*217,735
Total quantity transhipped from Kingston, Prescott and Ogdensburg to Cardinal	....	3,368
" remaining at Kingston, Prescott, Ogdensburg and other ports	....	111,159
Total	....	346,775

*Of this quantity 38,403 tons were transhipped from Ogdensburg to Montreal.

Q.—**Comparative Statement** of the Quantity of Grain passed Down the Welland Canal to Kingston, Prescott and Ogdensburg, for the seasons of navigation in 1899 and 1900.

—	1899.		1900.	
	No. of Cargoes.	Tons.	No. of Cargoes.	Tons.
Quantity arrived at Kingston and Prescott in Canadian vessels	162	221,306	325	183,200
Quantity arrived at Kingston, Prescott and Ogdensburg in United States vessels	167	205,571	239	163,575
Total	329	426,877	564	346,775
Quantity transhipped at Kingston, Prescott and Ogdensburg in Canadian vessels for Montreal	....	313,497	....	217,735
Quantity taken to Montreal in vessels in which it arrived at Kingston and Prescott	....	5,359	....	14,513
Quantity remaining at Kingston, Prescott, Ogdensburg and Cardinal	....	*108,021	....	114,527
Total	....	426,877	....	346,775

* Of this quantity 12,413 tons were transhipped to Montreal in 1900.

15 vessels took their cargoes through to Montreal intact in 1900, against 2 in 1899; 7 vessels discharged part of their cargo in 1900 against 11 in 1899; 542 vessels discharged all of their cargoes in 1900 against 316 in 1899.

R.—**Statement** showing the Number of Vessels, their Tonnage, Number of Passengers and Tons of Freight passed down the Rapids of the St. Lawrence Canals, during the Season of Navigation in 1900.

Destination.	No. of Sections.	No. of Vessels.	Tonnage of Vessels.	No. of Passengers.	Class Three.	Class Four.	Class Five.	Special Class.	Tolls.
			Tons.		Tons.	Tons.	Tons.	Tons.	$ cts.
Prescott to Montreal	4	118	64,928	14,458	86	1,468	...	....	2,243 47
" Lachine	3	33	17,546	1,826	1,521	411	......	......	468 83
Dickinson's Landing to Montreal	3	8	5,184	981	......	48	.....	......	109 99
Valleyfield to Montreal	2	5	783	60	......	......	......	......	5 94
" Lachine	1	201	25,718	3,889	972	343	10	......	202 26
Lachine to Montreal	1	300	59,967	14,296	891	177	......	.....	472 31
Total	....	665	174,126	35,510	3,470	2,447	10	.....	3,502 80

S.—The quantity of Coal passed through the Welland Canal during a series of years from 1885 to 1900, inclusive, and the amount of Tolls collected thereon, is as follows:—

Year.	From Canadian Ports to Canadian Ports.	From Canadian Ports to Canadian Ports.	From United States Ports to United States Ports.		From United States Ports to Canadian Ports.		Total Tons.	Amount of Tolls Paid. — Rate 20 cents a ton.
	Up.	Down.	Up.	Down.	Up.	Down.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		$ cts.
1885	....	....	193,442	4,974	10,321	31,350	240,087	48,017 40
1886	....	....	184,564	5,400	22,187	49,724	261,875	52,375 00
1887	....	....	81,617	1,163	26,775	25,968	135,523	27,104 60
1888	....	....	172,381	878	17,365	27,183	217,807	43,561 40
1889	....	....	226,352	1,124	12,036	25,931	265,443	53,188 60
1890	80	....	116,616	615	17,280	22,781	202,372	38,222 30
1891	....	....	185,190	1,382	17,374	20,698	224,644	44,928 20
1892	....	....	183,244	651	12,391	15,330	211,616	42,284 13
1893	....	....	204,704	2,123	8,325	17,944	233,096	46,619 20
1894	....	....	187,794	727	1,269	13,947	203,737	40,789 93
1895	4	....	148,887	603	1,565	7,807	158,866	31,773 05
1896	20	210	206,093	1,255	4,127	11,740	223,445	44,668 20
1897	....	4	165,143	....	1,277	9,799	176,223	35,244 60
1898	....	....	156,055	759	986	4,536	162,336	32,467 20
1899	....	....	86,638	2,293	525	8,276	97,732	19,546 40
1900	8	....	45,032	992	....	1,360	47,392	9,478 40

Note.—Tolls on soft coal passed down the Welland Canal, during the season of 1890, were reduced from 20 to 10 cents a ton, per O.C. 11th May, 1890, for the season of 1890 only, the rate for 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899 and 1900 being 20 cents a ton for passage either eastward or westward.

T.—Statement showing the quantity of Coal passed through the whole length of the St. Lawrence Canals during the seasons of 1885 to 1900, inclusive.

Year.	Quantity passed up Free of Tolls.	Quantity passed down to Montreal.	Total Quantity passed up and down.	Amount of tolls on Quantity passed down to Montreal.
	Tons.	Tons.	Tons.	$ cts.
1885	5,035	122,829	127,864	18,424 35
1886	3,301	118,802	122,103	17,820 70
1887	7,579	121,618	129,197	18,242 70
1888	8,341	123,050	131,391	18,423 90
1889	5,360	124,290	129,650	18,604 90
1890	6,538	135,168	141,706	20,275 20
1891	7,951	141,701	149,652	21,255 15
1892	7,543	157,134	164,677	23,570 10
1893	2,285	147,139	149,424	22,070 85
1894	16,213	169,552	185,765	25,432 80
1895	....	165,151	165,151	24,772 65
1896	689	161,551	162,240	24,232 65
1897	40	164,963	165,003	24,722 37
1898	400	175,609	176,009	26,341 05
1899	448	201,546	201,994	30,231 80
1900	10	280,169	280,179	42,025 35

Note.—Coal is allowed to pass free up the St. Lawrence Canals.

U.—Comparative Statement of the Quantity of Through Freight passed Down the Welland Canal, showing the Quantity to Montreal, the Quantity to Canadian Ports between Port Dalhousie and Cornwall, and the Quantity to United States Ports, Oswego, Ogdensburg, &c., on the south side of Lake Ontario, for the years 1889 to 1900, inclusive.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dolhousie and Cornwall.	Quantity passed down to United States Ports.
1889.	Tons.	Tons.	Tons.
Ashes, pot and pearl	107	5	....
Coal	....	25,931	1,124
Corn	195,350	11,200	147,045
Crockery and earthenware	....	1	1
Fish	....	5	....
Flour	6,841	....	5,017
Furniture	....	4	30
Horses	2	....	1
Iron, pig	....	613	....
" all other	....	....	520
Lard and lard oil	....	5	19
Meal, all kinds	148	....	17,224
Meats, other than pork	32	2	3
Molasses	....	....	88
Oats	320	....	27,492
Oil, in barrels	4	2	....
Oil cake	798	....	....
Potatoes	....	....	1
Pork	1,220	114	21
Rye	1,284	634	....
Salt	....	316	....
Stone, for cutting	....	6,784	....
" wrought	....	11	2
" not suitabie for cutting	....	376	1,681
Seeds, all kinds	3	....	151
Spirits, beer, &c	20	8	190
Tallow	....	....	13
Wheat	70,815	7,241	39,229
Wool	....	....	452
Merchandise	193	129	1,591
Barrels, empty	....	....	173
Lumber, sawn	6,118	4,669	71,055
Masts, spars, &c	....	220	....
Railway ties	....	852	....
Saw logs	....	....	158
Staves and headings, barrel	....	4	....
" " pipe	202	304	....
" " West India	68	559	....
Shingles	....	....	51
Split posts, &c	....	17	....
Timber, square	9,302	70,579	240
Woodenware, &c	....	....	2
Total	202,827	130,584	313,574

A refund of 18 cents per ton was allowed on wheat, corn, pease, barley and rye, passed down to Monteal, per Order in Council, 18th March, 1889.

U.—Comparative Statement of the Quantity of Through Freight passed Down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1890.	Tons.	Tons.	Tons.
Ashes	70		
All other products, animal	14		
" vegetable	1		
Barley			6,519
Bricks			4
Coal		22,781	615
Corn	134,966	11,584	180,842
Fish	49		
Flour	3,065		9,204
Furniture	1	1	21
Glass, all kinds	1		
Horses	3		1
Iron, all other			1
Kryolite		1,280	1,620
Lard and lard oil		5	30
Meal	222		20,482
Meats			15
Oats	479	73	27,030
Oil, in barrels	6		
Oil cake	2		
Paint			3
Pease			14
Pork	221	19	88
Potatoes			1
Rye	1,120	1	
Salt		701	
Stone, for cutting		5,761	
" wrought		639	18
Seeds, all kinds	2		135
Spirits, &c	26		228
Tallow	54		
Wheat	75,515	5,241	31,527
White lead			1
Merchandise	142	32	1,822
Barrels, empty			7
Firewood, in vessels		1,398	
Lumber, sawn, in vessels	3,195	3,767	47,590
" " rafts	384		
Staves and headings, pipe		187	
" " West Indies		36	
Shingles			14
Square timber, in vessels		73,112	
" rafts		17,683	
Woodenware	1		1
	219,539	144,301	327,833
Corn 16,033			
Oats 400	16,433		*16,433
Totals	235,972	144,301	311,400

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*This quantity of grain was transhipped at Ogdensburg and passed down the St. Lawrence canals to Montreal.

A refund of 18 cents Welland Canal tolls was allowed on wheat, Indian corn, pease, barley, rye (and oats for export), when shipped for Montreal or some port east of that point, per Orders in Council 26th February and 5th May, 1890.

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed Down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian ports between Port Dalhousie and Cornwall.	Quantity passed down to United States ports.
1891.	Tons.	Tons.	Tons.
Ashes	40		
Agricultural products	2		42
Barley			8,113
Corn	52,539	5,144	127,494
Coal		20,698	1,382
Flour	3,324		8,802
Fish			1
Furniture	2	2	7
Glass	1		1
Horses	2	2	3
Hay		21	
Iron, pig	371	128	
" all other		1,036	10
Lard and lard oil	100	16	10
Meal, all kinds	67		26 096
Meats, other than pork		1	2
Molasses		20	18
Oats			52,823
Oil			1
Pease	390		
Pork	201		73
Rags			60
Rye	64,978	969	
Seeds, all kinds	2		256
Salt		1,861	494
Stone for cutting		6,602	
" wrought		7	
Tobacco	1		
Tallow		9	8
Wheat	159,785	692	32,097
Staves, pipe		8	
Whisky and all other liquors	105	57	167
Wool			1,237
Merchandise	278	6	1,779
Kryolite		1,098	1,773
Lumber, in vessels	2,991	1,300	56,456
" in rafts	917		
Timber, square, in rafts	5,680	14,638	
Barrels			4
Corn 12,169	291,776	54,315	317,209
Wheat 5,648			
17,817	17,817		*17,817
Total	309,593	54,315	299,392

* This quantity of grain was transhipped at Ogdensburg and passed down the St. Lawrence Canals to Montreal.

A refund of 18 cents a ton, Welland Canal tolls, on wheat, Indian corn, pease, barley, rye and (for export) oats, originally shipped for Montreal or some port east of Montreal, per Order in Council, March 25, 1891.

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian ports between Port Dalhousie and Cornwall.	Quantity passed down to United States ports.
1892.	Tons.	Tons.	Tons.
Ashes, pot and pearl	17	2	
Apples	54		
Barley			6,433
Corn	53,689	7,637	131,222
Coal		14,839	651
Flour	2,874		11,018
Fish	9		
Furniture	1		7
Hides	20		
Horses	2		
Iron, railway		100	
" all other		765	1
Meal, all kinds	16		31,724
Meats, other than pork	94		29
Oats			36,935
Oil		7	
Pease	524		
Potatoes			1
Pork			44
Rye	9,119	273	
Salt		865	
Seeds, all kinds	75		50
Steel			1
Stone for cutting		1,264	
Sugar			20
Wheat	194,281	5,373	26,950
Whisky, beer, spirits, &c	6	15	46
Wool			70
Merchandise not enumerated	36	13	1,304
Barrels, empty	1		29
Lumber, sawn, in vessels	1,678	150	83,403
Square timber	440	42,768	440
Staves and headings, pipe	8	80	
" " West India	200	76	
Shingles			25
Total	263,144	74,227	330,403
* Wheat	+4,341	—4,341	
Total	267,485	69,886	330,403

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* This quantity of wheat was taken from Kingston to Ogdensburg and stored in elevators, and subsequently transhipped to Montreal.

A refund of 18 cents a ton, Welland Canal tolls, was allowed on wheat, Indian corn, pease, barley, rye, oats, flaxseed and buckwheat which passed down the whole length of the Welland and St. Lawrence Canals, to Montreal, or any port east of Montreal, and such products exported out of the country, and in such cases only.

U.—Compartive Statement of the Quantity of Through Freight passed down the Welland Canals, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1893.	Tons.	Tons.	Tons.
Ashes, pot and pearl	23		
Barley	600	1,110	16,751
Bricks		1,251	
Corn	278,564	5,752	156,776
Coal		17,944	2,123
Flour	5,514		6,588
Fish			5
Furniture			6
Horses	1	1	2
Iron, pig			100
" all other			2
Meal, all kinds		1,025	36,352
Meats, other than pork			1
Oats	9,761	1,090	20,313
Pork			52
Rye	3,669	1	1
Salt		286	
Seeds, all kinds			16
Wheat	209,212	17,602	29,117
Whisky, beer, &c.	1		83
Wool			80
Merchandise not enumerated	4	2	1,693
Barrels empty			9
Firewood (in rafts)		15	
Lumber, sawn, in vessels	667	1,981	123,665
Shingles			13
Square timber		45,605	
Staves and headings, barrel		12	
" pipe		7	
" West India		53	
Total	508,016	93,737	393,748

There was no rebate allowed of the Welland Canal toll on grain passed down to Montreal during the season of navigation in 1893.

The tolls were, however, reduced by Order in Council of 13th February, 1893, as follows:—"For the season of 1893, the canal toll for the passage of the following food products: wheat, Indian corn, pease, barley, rye, oats, flaxseed and buckwheat, for passage eastward through the Welland Canal be ten cents per ton; and for passage eastward through the St. Lawrence Canals only, ten cents per ton, payment of the said toll of ten cents a ton for passage through the Welland Canal to entitle these products to free passage through the St. Lawrence Canals."

U.—Comparative Statement of the Quantity of Through Freight passed down the Welland Canal, &c—.*Continued*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1894	Tons.	Tons.	Tons.
Apples	50	....	....
Ashes	19	....	....
Barley	258	....	28,095
Bricks	....	552	....
Coal	....	13,818	727
Corn	60,661	3,243	105,329
Dye woods and dye stuffs	....	4	2
Fish	....	....	5
Flour	16,503	41	16,880
Furniture	2	3	....
Horses	1	2	4
Iron, pig	195	2,170	....
" all other	1	183	....
Meals	4	....	60,390
Nails	....	....	57
Oats	175	107	27,621
Oil cake	29	....	....
" in barrels	....	27	....
Pork	717	....	56
Salt	....	133	....
Spirits, beer, &c	....	3	....
Sugar	....	....	52
Wheat	212,557	13,349	42,934
White lead	16	....	....
Wool	....	....	1,484
Merchandise not enumerated	314	....	2,889
Barrels, empty	....	16	....
Sawn lumber, in vessels	683	....	86,545
Square timber "	....	47,030	....
Woodenware	6	....	....
Total	292,191	80,681	373,070

There was no rebate allowed of the Welland Canal toll on grain passed down to Montreal during th season of navigation in 1894.

The tolls were, however, reduced by Order in Council of 16th April, 1894, as follows :—For the season of 1894, the canal tolls for the passage of the following food products: wheat, Indian corn, pease, barley, rye, oats, flaxseed and buckwheat, for passage eastward through the Welland Canal be ten cents per ton; and for passage eastward through the St. Lawrence Canals only, ten cents per ton, payment of the said toll of ten cents a ton for passage through the Welland Canal to entitle these products to free passage through the St. Lawrence Canals.

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1895.	Tons.	Tons.	Tons.
Apples	28		
Ashes	34	15	
Barley	959		7,730
Bricks		651	
Coal		7,809	603
Corn	70,235	2,912	91,743
Flour	30,916	1,824	10,265
Furniture		12	2
Glass		1	
Horses	1	1	
Hides, skins, &c			8
Iron, railway			181
" pig	79	1,994	
" all other	1,766	1,408	214
Lard and lard oil			6
Meal, all kinds	65		46,316
Meats other than pork			30
Molasses	100		
Oats	1,654	123	16,442
Oil, in barrels	6	41	30
Pork			87
Paint	2		
Salt		36	
Stone, for cutting		430	
Seeds, all kinds			14
Steel	394		462
Sugar			59
Spirits, beer, &c	101	84	15
Tobacco		16	
Wheat	*158,643	29,061	17,908
Wool			1,536
Merchandise not enumerated	558	1,302	7,656
Barrels, empty	1		
Sawn lumber in vessels	1,117	492	43,286
Railway ties "			1,942
Shingles		19	
Square timber in vessels		63,715	500
Total	266,659	111,946	247,035

* Of this amount 3,469 tons came down to Kingston in 1894, were stored there and taken to Montreal in 1895; and 245 tons came down to Ogdensburg in 1894, stored there and transhipped to Montreal in 1895.

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1896.	Tons.	Tons.	Tons.
All other (vegetable)	29		
Apples	†1,263		
Ashes	94		
Barley	240		11,128
Cement and water lime	12		
Coal		11,742	1,255
Corn	182,330	19,688	118,426
Crockery	5		
Fish		2	
Flour	11,964	13,846	16,224
Furniture		3	
Glass	9	3	
Hay, pressed		563	
Hides, skins, &c			41
Horses	1	1	3
Iron, railway		1,192	
" pig	5	1,559	
" all other	2,020	1,725	
Lard and lard oil			1,348
Meal, all kinds		500	46,456
Molasses	167		
Oats	12,373	1,454	14,351
Oil, in barrels	23		1,005
Pease	3,020	10	
Pork	1		390
Rags	4		
Rye	8,323	647	
Salt		80	
Seeds, all kinds	20		78
Steel	542	11,317	498
Sugar	1		165
Tobacco		1	
Wheat	*254,763	51,587	16,467
Wool		8	900
Merchandise not enumerated	376	54	3,990
Barrels, empty			10
Firewood in vessels			165
Sawn lumber "	657	1,286	78,397
Shingles		94	40
Square timber in vessels		55,588	
" rafts	1,200		
Woodenware			12
Total	479,442	172,950	311,349

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† 523 tons of this quantity of apples paid full tolls by sections on the Welland Canal, and consequently does not appear on the Welland Through Statement.

* Of this amount 5,290 tons came down to Kingston in 1895, were stored there, and transhipped to Montreal in 1896.

U.—Comparative Statement of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quautity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1897.	Tons.	Tons.	Tons.
Agricultural products, vegetable			32
Ashes	133		
Barley			14,173
Bricks		739	845
Clay, lime and sand	38	430	
Coal		9,803	
Corn	*264,396	11,103	115,689
Flax seed	3,293	169	
Flour	1,029	211	7,237
Furniture	1	5	
Glass	53	9	
Hay, pressed			301
Horses	1	1	3
Hides and skins, &c			23
Iron, railway		6,241	965
" pig		2,828	
" all other	7,564	6,143	
Lard and lard oil			1,444
Meal, all kinds		699	41,644
Molasses	9		
Oats	*6,847	3,046	15,233
Oil, in barrels	112	51	198
Pease	*2,078	3	
Pork			243
Rye	8,435	48	
Salt	216		
Stone for cutting		330	
Seeds, all kinds			299
Steel	375	4,680	
Sugar			31
Spirits, beer, &c	46		
Tobacco	51		
Wheat	*278,498	†39,057	12,661
Wool			197
Merchandise not enumerated	1,214	347	3,591
Firewood, in vessels		12	
Hoops	257	8	
Lumber, sawn, in vessels	478	1,158	69,710
Masts " "			403
" " rafts		5	
Railway ties, in vessels		999	
Split posts "		4	
Timber, square "	1,207	81,117	1,040
Staves and headings, salt barrel	4,716		
Woodenware			1
Total	581,047	169,246	285,963

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* Of this quantity of corn 573 tons came down to Ogdensburg and Prescott in 1896, were stored there and transhipped to Montreal in 1897.

* Of this quantity of oats 50 tons came down to Prescott in 1896 and passed down to Montreal in 1897, and 170 tons passed through on St. Catharines Reports; 136 tons of which passed down to Montreal.

* Of this quantity of pease 230 tons were transhipped and passed through on St. Catharines Reports.

† Of this quantity of wheat 624 tons were transhipped and passed through on St. Catharines Reports, and 7,072 tons came down to Kingston and Prescott in 1896 and passed down to Montreal in 1897.

† Of this quantity, 1,079 tons were transhipped and passed through on St. Catharines Reports.

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1898.	Tons.	Tons.	Tons.
Agricultural products, vegetable	56		
Ashes	73		
Barley	3,960	1,417	6,909
Cement and water line			300
Clay, lime and sand	52	1	
Coal		4,536	759
Corn	*310,498	13,338	116,317
Flax seed	5,687	9	
Flour	653		4,212
Furniture			2
Glass	75		
Horses	4		
Iron, railway		674	770
" pig		4,187	
" all other	6,217	257	324
" ore		13,433	
Lard and lard oil			3,671
Meal, all kinds			22,626
Molasses	56		
Oats	3,975	625	12,729
Oil, in barrels	1,141	15	119
Paint			3
Pease	260		45
Pork			1,271
Rye	*16,133	39	
Salt	144	644	
Seeds, all kinds			44
Spirits, beer, &c	4		34
Steel	1,351	3,122	2,951
Stone for cutting		554	
Tallow			359
Wheat	*184,706	15,860	8,612
Wool			89
Merchandise, not enumerated	866	25	3,828
Firewood, in vessels		747	
Lumber, sawn, in vessels	3,065	2,840	72,897
Railway ties		190	
Shingles		11	
Square timber	329	48,369	
Total	539,305	110,893	258,871

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* Of this quantity of corn 2,340 tons came down to Ogdensburg and Prescott in 1897, were stored there and transhipped to Montreal in 1898.

* Of this quantity of rye 45 tons came down to Prescott in 1897, were stored there and transhipped to Montreal in 1898.

* Of this quantity of wheat 4,165 tons came down to Kingston in 1897, were stored there and transhipped to Montreal in 1898.

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1899.	Tons.	Tons.	Tons.
Agricultural products, vegetable	32		
Ashes	58		
Barley	596		1,828
Clay, lime and sand	15		
Coal		8,276	2,293
Corn	*150,999	16,594	43,854
Flax seed	200		
Flour	4,229	1,889	4,404
Furniture		2	7
Glass	16		
Horses	1		
Iron, all other	5,063		294
Iron ore		26,125	
Lard and lard oil		3	864
Meal, all kinds			18,198
Molasses	159		8
Nails	1	1	11
Oats	*10,250	1	13,139
Oil, in barrels	7,143	2	254
Paint			2
Pork			343
Rags			1
Rye	923		
Salt	183	479	549
Seeds, all kinds			11
Spirits, beer, &c	74	71	168
Steel	3,000	1,562	11,802
Stone for cutting		429	
Tallow			201
Tobacco	96		
Wheat	*169,978	23,602	9,190
Wool			130
Merchandise, not enumerated	518	126	6,219
Barrels, empty	1		
Firewood in vessels		27	
Hop poles		100	
Lumber, sawn, in vessels	924	4,583	57,695
Masts and spars "		3	
Railway ties "		74	1,273
Shingles		50	
Square timber, in vessels	26	24,959	
Total	354,485	108,958	172,738

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*Of this quantity of corn 7,443 tons came down to Ogdensburg and Prescott in 1898, were stored there and transhipped to Montreal in 1899.

*Of this quantity of oats 187 tons passed down on Dunnville pass to Montreal.

*Of this quantity of wheat 6,447 tons passed down to Kingston in 1898, were stored there and transhipped to Montreal in 1899.

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port-Dalhousie and Cornwall.	Quantity. passed down to United States Ports.
1900.	Tons.	Tons.	Tons.
Agricultural products, vegetable		1	6
Ashes	25	15	
Barley	1,288	563	1,598
Cement and water lime			18
Clay, lime and sand	15		
Coal		1,360	992
Corn	*109,359	9,844	44,306
Flour	1,595	990	6,371
Furniture	1		
Glass, all kinds	6	4	
Horses			4
Iron, pig	508	1,284	
" all other	4,292	1,044	714
" ore		58,400	
Lard and lard oil			1,588
Meal (all kinds)			14,244
Molasses		21	57
Oats	*8,925	348	30,840
Oil, in barrels	15,647	4,288	17
Oil-cake			2,705
Paint		2	36
Pease	115		4
Pitch and tar		24	
Pork			117
Rye	3,078	160	300
Salt		467	
Soda, ash		15	
Steel	5,420		2,601
Sugar			154
Tallow			631
Wheat	*121,896	6,610	7,541
White lead	16		
Merchandise not enumerated	103	154	7,899
Barrels, empty	182	407	5
Firewood, in vessels		1,143	
Lumber, sawn, in vessels	15,760	5,701	55,128
Shingles		90	
Square timber, in vessels		20,267	
Staves		3	
Total	288,231	113,205	177,876

*Of this quantity of corn 751 tons came to Ogdensburg, Kingston and Prescott in 1899, were stored there and transhipped to Montreal in 1900.

*Of this quantity of oats 585 tons came down to Ogdensburg, Kingston and Prescott in 1899, were stored there and transhipped to Montreal in 1900.

*Of this quantity of wheat 10,835 tons came down to Ogdensburg, Kingston and Prescott in 1900, were stored there and transhipped to Montreal in 1900.

U.—STATEMENT showing the quantity of Through Freight passed down the Welland Canal to Canadian Ports, &c.—*Continued.*

RECAPITULATION.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on the south side of Lake Ontario.
1889.	Tons.	Tons.	Tons.
Barley			
Corn	195,350	11,200	147,045
*Oats	320		27,492
Peas			
Rye	1,284	634	
Wheat	70,815	7,241	39,229
Total grain	267,769	19,075	213,766
Other articles	25,158	111,509	99,808
Total	292,927	130,584	313,574
1890.			
Barley			6,519
Corn	150,999	11,584	180,842
Oats	879	73	27,030
Peas			14
Rye	1,120	1	
Wheat	75,515	5,241	31,527
Total grain	228,513	16,899	‡245,932
Other articles	7,459	127,502	81,901
Total	235,972	144,301	327,833
1891.			
Barley			8,113
Corn	52,539	5,144	127,494
Oats			52,823
Peas	390		
Rye	64,978	969	
Wheat	159,785	692	32,097
Total grain	277,692	6,805	220,527
Transhipped at Ogdensburg to Montreal	+17,817		−17,817
Total	295,509		202,710
Other articles	14,084	47,510	96,682
Total	309,593	54,315	299,392
1892.			
Barley			6,433
Corn	53,689	7,637	131,222
Oats			36,935
Peas	524		
Rye	9,119	273	
Wheat	194,281	5,373	26,950
Total grain	257,613	13,283	201,540
Quantity taken to Ogdensburg and transhipped to Montreal	** 4,341	4,341	
Total	261,954	8,942	201,540
Other articles	5,531	60,944	128,863
Total	267,485	69,886	330,403

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* There was no rebate on oats for 1889.

** This quantity of wheat was taken from Kingston to Ogdensburg, stored in elevators and subsequently transhipped to Montreal.

‡ Of this quantity of grain 16,433 tons were transhipped at Ogdensburg to Montreal.

U.—Statement showing the quantity of Through Freight passed down the Welland Canal to Canadian Ports, &c.—*Continued.*

RECAPITULATION—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on the south side of Lake Ontario.
1893.	Tons.	Tons.	Tons.
Barley	600	1,110	16,751
Corn	278,564	5,752	156,776
Oats	9,761	1,090	20,313
Pease	....	....	....
Rye	3,669	1	1
Wheat	209,212	17,602	29,117
Total grain	501,806	25,555	222,958
Other articles	6,210	68,182	170,790
Total	508,016	93,737	393,748
1894.			
Barley	258	....	28,095
Corn	60,661	3,243	105,329
Oats	175	107	27,621
Pease	....	....	....
Rye	....	....	....
Wheat	212,557	13,349	42,934
Total grain	273,651	16,699	203,979
Other articles	18,540	63,982	169,091
Total	292,191	80,681	373,070
1895.			
Barley	959	....	7,730
Corn	70,265	2,912	91,743
Oats	1,654	123	16,442
Rye	....	....	....
Wheat	†158,643	29,061	17,908
Total grain	231,491	32,096	133,823
Other articles	35,168	79,850	113,212
Total	266,659	111,946	247,035
1896.			
Barley	240	....	11,128
Corn	182,330	19,688	118,426
Oats	12,373	1,454	14,351
Pease	3,020	10	....
Rye	8,323	647	....
Wheat	254,763	51,587	16,467
Total grain	‡461,049	73,386	160,372
Other articles	18,393	99,564	150,977
Total	479,442	172,950	311,349

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† Of this amount, 3,469 tons came down to Kingston in 1894, was stored there, and taken to Montreal in 1895, and 245 tons came down to Ogdensburg in 1894, was stored there and transhipped to Montreal in 1895.

‡ Of this amount, 5,290 tons came down to Kingston in 1895, was stored there, and transhipped to Montreal in 1896.

U.—STATEMENT showing the quantity of Through Freight passed down the Welland Canal to Canadian Ports, &c.—*Concluded.*

RECAPITULATION—*Concluded.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on the south side of Lake Ontario.
1897.	Tons.	Tons.	Tons.
Barley	....	....	14,173
Corn	264,396	11,103	115,689
Oats	6,847	3,046	15,233
Pease	2,078	3	....
Rye	8,435	48	....
Wheat	278,498	39,057	12,661
Total grain	*560,254	53,257	157,756
Other articles	20,793	115,989	128,207
Total	581,047	169,246	285,963
1898.			
Barley	3,960	1,417	6,909
Corn	310,498	13,338	116,317
Oats	3,975	625	12,729
Pease	260	....	45
Rye	16,133	39	....
Wheat	184,706	15,860	8,612
Total grain	**519,532	31,279	144,612
Other articles	19,773	79,614	114,259
Total	539,305	110,893	258,871
1899.			
Barley	596	....	1,828
Corn	150,999	16,594	43,854
Oats	10,250	1	13,139
Pease	....	....	....
Rye	923	....	....
Wheat	169,978	23,602	9,190
Total grain	***332,746	40,197	68,011
Other articles	21,739	68,761	104,727
Total	354,485	108,958	172,732
1900.			
Barley	1,288	563	1,598
Corn	109,359	9,844	44,306
Oats	8,925	348	30,840
Pease	115	....	4
Rye	3,078	160	300
Wheat	121,896	6,610	7,541
Total grain	† 244,661	17,525	84,589
Other articles	43,570	95,680	93,287
Total	288,231	113,205	177,876

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* Of this quantity, 7,695 tons came down in 1896 and were transhipped to Montreal in 1897.

** Of this quantity, 6,550 tons came down in 1897 and were transhipped to Montreal in 1898.

*** Of this quantity, 14,077 tons came down in 1898 and were transhipped to Montreal in 1899.

† Of this quantity, 12,171 tons came down in 1899 and were transhipped to Montreal in 1900.

COMPARATIVE STATEMENT showing the quantity of Vegetable Food and Lumber passed through the Canals during the years ended December 31, 1899 and 1900.

—	Vegetable Food.								Lumber.	Total.
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Buck-wheat.	All other.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland Canal, 1899	11,625	197,732	204,004	2,907	24,037	923	4	18,460	67,850	527,542
" 1900	10,968	137,800	163,509	4,035	41,055	3,538	....	14,815	77,470	453,190
Increase	....	....	....	1,128	17,018	2,615	....	....	9,620	....
Decrease	657	59,932	40,495	....	....	....	4	3,645	....	74,352
St. Lawrence Canals, 1899	27,833	299,567	350,110	25,230	43,068	6,522	1,296	17,020	26,648	799,294
" 1900	13,277	276,229	288,169	21,096	52,983	12,544	1,159	16,432	59,543	741,432
Increase	....	....	....	....	9,915	6,022	....	....	30,895	....
Decrease	14,556	23,338	61,941	4,134	....	....	137	588	....	57,862
Chambly Canal, 1899	409	....	....	30	4,342	....	....	274	56,833	61,888
" 1900	524	....	....	48	3,867	....	....	576	39,605	44,620
Increase	115	....	....	18	....	....	....	302	....	....
Decrease	....	....	....	....	475	....	....	....	17,228	17,268
Ottawa Canals, 1899	125	....	....	....	1,441	10	40	508	406,378	408,502
" 1900	11	....	....	2	1,752	3	117	242	302,132	304,259
Increase	....	....	....	2	311	....	77	....	....	....
Decrease	114	....	....	....	....	7	....	266	104,246	104,243
Rideau Canal, 1899	788	213	110	....	823	7	33	336	28,534	30,844
" 1900	470	313	147	....	670	28	63	287	29,728	31,706

Increase		100	37			21	30		1,194	862
Decrease	318				153			49		
St. Peter's Canal, 1899	2,460		21	7	2,010			3,190	9,208	16,896
" 1900	1,851		8	9	2,257			3,959	15,261	23,345
Increase			13	2	247			769	6,053	6,449
Decrease	609									
Trent Valley Canals, 1899		437		13	16			26	2,697	3,189
" 1900		627							1,948	2,575
Increase		190								
Decrease				13	16			26	749	614
Murray Canal, 1899	7	1,115	56	762	8	392	79	667	311	3,397
" 1900	10	1,240		332		664	128	721	372	3,467
Increase	3	125				272	49	54	61	70
Decrease			56	430	8					
Sault Ste. Marie Canal, 1899	119,888	382,789	20,842	2,040	3,196	3,528		16,014	13,271	561,568
" 1900	72,029	278,761	9,975	2,520	2,403	1,148		1,726	12,408	380,970
Increase				480						
Decrease	47,859	104,028	10,867		793	2,380		14,288	863	180,598
Total, increase					26,046	6,543	15			
Total, decrease	63.995	186,883	113,335	2,947				17,737	75,263	427,556

Total for year 1899	2,413,120
" 1900	1,985,556

Department of Railways and Canals,
Ottawa, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

CANAL

COMPARATIVE STATEMENT for years

——	January.	February.	March.	April.	May.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Welland Canal, 1899			2 31	3,731 14	24,339 23
" 1900				4,958 86	17,311 23
Increase				1,227 72	
Decrease			2 31		7,028 00
St. Lawrence Canals, 1899				712 35	15,762 82
" 1900				1,001 53	14,417 71
Increase				289 18	
Decrease					1,345 11
Chambly Canal, 1899				9 25	3,932 67
" 1900				8 91	3,946 01
Increase					13 34
Decrease				0 34	
Ottawa Canals, 1899				37 22	6,264 76
" 1900				4 37	3,569 35
Increase					
Decrease				32 85	2,695 41
Rideau Canal, 1899				45 00	1,118 65
" 1900					979 24
Increase					
Decrease				45 00	139 41
St. Peter's Canal, 1899	12 30			35 59	271 86
" 1900	27 55			96 61	303 92
Increase	15 25			61 02	32 06
Decrease					
Trent Valley Canals, 1899				4 33	107 03
" 1900				33 44	49 66
Increase				29 11	
Decrease					57 37
Murray Canal, 1899				13 06	58 56
" 1900				8 65	68 69
Increase					10 13
Decrease				4 41	
Saut Ste. Marie Canal, 1899					
" 1900			56 51		
Increase			56 51		
Decrease					
Total, increase	15 25		54 20	1,524 43	
Total, decrease					11,209 77

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

REVENUE.

ended 31st December, 1899–1900.

June.	July.	August.	September.	October.	November.	December.	Total.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
20,275 62	15,833 28	14,186 32	12,931 99	12,642 00	11,820 31	2,297 93	118,110 13
14,810 17	13,610 07	15,851 41	14,518 43	10,840 60	10,145 40	2,247 63	104,293 80
		1,665 09	1,586 44				
5,465 45	2,273 21			1,801 40	1,674 91	50 30	13,816 33
15,512 62	16,118 20	15,882 03	11,689 43	12,500 32	12,606 37	146 06	100,930 20
14,226 39	16,756 62	17,305 50	14,064 77	13,185 51	12,225 70	189 11	103,372 84
	638 42	1,423 47	2,375 34	685 19		43 05	2,442 64
1,286 23					380 67		
3,924 05	4,247 11	4,343 85	2,953 27	4,144 51	2,436 45	8 94	26,000 10
3,434 92	4,121 12	4,344 89	3,324 84	3,073 19	1,954 10	12 37	24,220 35
		1 04	371 57			3 43	
489 13	125 99			1,071 32	482 35		1,779 75
5,549 08	5,605 08	5,257 66	4,598 24	5,238 43	2,832 93		35,383 40
3,411 47	3,900 07	4,446 61	3,837 16	4,128 26	2,327 99		25,625 28
2,137 61	1,705 01	811 05	761 08	1,110 17	504 94		9,758 12
736 75	1,104 92	1,124 50	754 58	758 14	400 03	7 41	6,049 98
1,344 90	1,340 91	912 19	750 75	592 92	509 96	7 34	6,438 21
608 15	235 99				109 93		388 23
		212 31	3 83	165 22		0 07	
308 92	423 14	516 46	518 30	396 46	380 69	287 61	3,151 33
389 55	517 69	511 26	301 68	332 84	337 81	236 74	3,055 65
80 63	94 55						
		5 20	216 62	63 62	42 88	50 87	95 68
150 63	218 18	241 49	247 37	185 82	157 64	0 25	1,312 74
169 18	218 96	256 80	192 10	187 53	115 14	1 00	1,223 81
18 55		15 31		1 71		0 75	
	0 78		55 27		42 50		88 93
95 91	142 98	132 40	120 78	89 05	61 25	0 50	714 49
86 82	149 10	197 53	130 77	118 69	69 55		829 80
	6 12	65 13	9 99	29 64	8 30		115 31
9 09						0 50	
							56 51
							56 51
		2,141 48	3,306 54				
8,680 18	3,128 35			3,495 19	3,010 02	54 51	22,536 12

Total for year 1899.......................................$291,652 37
Total for year 1900....................................... 269,116 25

RICHARD DEVLIN, *Compiler of Canal Statistics.*

APPENDIX A.

No. (A) 1.—General Statement showing the Quantity of each Article transported on the Welland Canal and the Amount of Revenue collected during the Season of Navigation in 1900.

Articles.	From Canadian to Canadian Ports. Up.	From Canadian to Canadian Ports. Down.	From Canadian to United States Ports. Up.	From Canadian to United States Ports. Down.	From United States to United States Ports. Up.	From United States to United States Ports. Down.	From United States to Canadian Ports. Up.	From United States to Canadian Ports. Down.	Tons. Up.	Tons. Down.	Total Tons.	Amount of Tolls, Up.	Amount of Tolls Down.	Total Amount of Tolls.
												$ cts.	$ cts.	$ cts.
Ashes, pot and pearl		12						28		40	40		8 00	8 00
Apples	8	438			5				13	438	451	1 95	10 96	12 91
Agricultural products not enumerated, vegetables	1					6			1	6	7	0 15	1 20	1 35
Agricultural products not enumerated, animal														
Agricultural implements														
Barley			586			2,402		1,047	586	3,449	4,035	87 90	344 90	432 80
Bricks	296	30							296	30	326	37 29	3 93	41 22
Bones														
Brimstone														
Cement and water lime	4				17	18			21	18	39	3 15	3 60	6 75
Clay, lime and Sand	298				95			2,615	393	2,615	3,008	23 61	198 01	221 62
Coal	8				45,032	992		1,360	45,040	2,352	47,392	9,008 00	470 40	9,478 40
Corn		618				60,545		102,346		163,509	163,509		16,350 90	16,350 90
Cattle														
Cotton (raw)														
Crockery and earthenware	11								11		11	1 65		1 65
Dye wood and dye stuffs														
Fish					342				342		342	51 30		51 30
Flax and hemp					470				470		470	70 50		70 50
Flour		2,012				7,966		990		10,968	10,968		1,877 55	1,877 55
Furniture		1	1		30			1	31	2	33	4 65	0 37	5 02
Gypsum														
Glass (all kinds)	20							10	20	10	30	3 00	2 00	5 00
Hay (pressed)		1								1	1		0 18	0 18
Hogs														
Horses	24	25	2		5	4			31	29	60	1 51	1 43	2 94
Hides and skins, horns and hoofs					51				51		51	7 65		7 65

Ice														
Iron, railway														
" pig								1,792		1,792	1,792		358 40	358 40
" all other	46	60	3		239	714		5,336	288	6,110	6,398	41 63	1,211 50	1,253 13
Iron ore								58,400		58,400	58,400		2,920 00	2,920 00
Kryolite chemical ore and other ore, except iron														
Lard and lard oil	9					1,588			9	1,588	1,597	1 35	317 60	318 95
Meal, all kinds						14,244				14,244	14,244		2,848 80	2,848 80
Meats, other than pork														
Marble					863				863		863	129 45		129 45
Manilla					174				174		174	26 10		26 10
Molasses					212	57		21	212	78	290	31 80	15 60	47 40
Nails	11								11		11	0 60		0 60
Oats	799	143				39,706		407	799	40,256	41,055	119 85	4,032 93	4,152 78
Oil (in barrels)	33	19,209	1		139	17		726	173	19,952	20,125	25 69	3,990 40	4,016 09
Oil cake						2,705				2,705	2,705		541 00	541 00
Pease		115				4				119	119		11 90	11 90
Potatoes		1								1	1		0 17	0 17
Pork	20					117			20	117	137	3 00	23 40	26 40
Paint	6				20	36		2	26	38	64	3 90	7 60	11 50
Pitch and tar	11							24	11	24	35	0 47	4 80	5 27
Rags	70								70		70	1 32		1 32
Rye		232				2,149		1,157		3,538	3,538		353 80	353 80
Rosin	14								14		14	0 27		0 27
Salt	1	229						303	1	532	533	0 15	98 28	98 43
Stone intended for cutting					21				21		21	3 15		3 15
" wrought														
" not suitable for cutting, unwrought	271								271		271	16 84		16 84
Seeds, all kinds	11								11		11	1 65		1 65
Sheep														
Soda ash	9				61			15	70	15	85	9 32	3 00	12 32
Steel	60				122	3,110		4,911	182	8,021	8,203	19 45	1,604 20	1,623 65
Sugar	47				13,192	154			13,239	154	13,393	1,981 26	30 80	2,012 06
Spirits, beer, &c	47					1			47	1	48	7 05	0 20	7 25
Tobacco (raw)														
Tallow					640	631			640	631	1,271	96 00	126 20	222 20
Tin														
Turpentine														
Wheat		89,374				18,771		29,655		137,800	137,800		13,809 21	13,809 21
White lead	1							16	1	16	17	0 15	3 20	3 35
Whiting														
Wool														
All other goods and merchandise not enumerated	2,245	2,362	47		37,744	7,899		2,605	40,036	12,866	52,902	5,750 04	1,869 60	7,619 64
Bark														
Barrels, (empty)	30	619			7	5		16	37	640	677	2 05	120 77	122 82
Boat knees														
Floats														

No. (A) 1.—GENERAL STATEMENT showing the Quantity of each Article transported on the Welland Canal, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												$ cts.	$ cts.	$ cts.
Fire wood, in vessels	405	5,817	1,671						2,076	5,817	7,893	92 91	328 45	421 36
" in rafts														
Hoops														
Hop poles														
Lumber, sawn, in vessels	72	14,758		4,144		55,128		3,362	72	77,392	77,464	11 54	13,871 17	13,882 71
" " rafts		4								4	4		0 30	30
Masts, spars, and telegraph poles, in vessels	9								9		9	1 80		1 80
Masts, spars, and telegraph poles, in rafts	6								6		6	0 65		0 65
Railway ties, in vessels	1,563								1,563		1,563	124 88		124 88
" in rafts														
Saw logs	415	3,507	2,999	161					3,414	3,668	7,082	69 24	209 32	278 56
Staves and headings, barrel		741		39						780	780		37 41	37 41
" " pipe														
" " West Indies														
" salt barrel														
Shingles		97								97	97		67 49	67 49
Split posts and fence rails, in vessels														
Split posts and fence rails, in rafts														
Timber, square, in vessels	42	5,629			10			14,638	52	20,267	20,319	3 82	3,038 94	3,042 76
" " in rafts														
Traverses									71					
Woodenware and wood partly manufactured	2				69						71	28 40		28 40
Total freight paying tolls	6,925	146,034	5,310	4,344	99,560	218,969		231,783	111,795	601,130	712,925	17,908 09	71,129 87	89,037 96

Articles having paid full tolls on the St. Lawrence Canals, free:—														
Bricks	20		29						49		49			
Cement and water lime	759		1,172						1,931		1,931			
Clay lime and sand	114		2						116		116			
Crockery and earthenware	5								5		5			
Fish			8						8		8			
Furniture			1						1		1			
Glass	14		442						456		456			
Iron, railing			74						74		74			
Iron, pig			3						3		3			
Iron, all other	278		1,191						1,469		1,469			
Nails	83		110						193		193			
Oils	1		73						74		74			
Paint	6		6						12		12			
Pitch and tar	21								21		21			
Pork	1								1		1			
Salt			48						48		48			
Seeds	5		213						218		218			
Soda ash			69						69		69			
Sugar	172		300						472		472			
Tin			117						117		117			
White lead	2		2						4		4			
Whiting	5		34						39		39			
Whiskey	8		287						295		295			
Merchandise	214		546						760		760			
Grand total freight	8,633	146,034	10,037	4,344	99,560	218,969		231,783	118,230	601,130	719,360			

Total tolls on vessels		7,172 99	7,225 02	14,398 01
" passengers		328 08	352 91	680 69
" free goods	$935.87			
Total tolls		25,409 16	78,707 80	104,116 96
Fines				70 00
Damages				
Harbour dues				22 04
Other receipts				84 80
Total revenue, exclusive of hydraulic rents				104,293 80

Department of Railways and Canals,
Ottawa, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

APPENDIX A—*Continued.*

No. (A) 2.—General Statement showing the Quantity of each Article of Through Freight transported on the Welland Canal and the Amount of Tolls collected during the Season of Navigation in 1900.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												$ cts.	$ cts.	$ cts.
Ashes, pot and pearl		12						28		40	40		8 00	8 00
Apples	8				5				13		13	1 95		1 95
Agricultural products not enumerated, vegetable	1					6			1	6	7	0 15	1 20	1 35
Agricultural products not enumerated, animal														
Barley			586			2,402		1,047	586	3,449	4,035	87 90	344 90	432 80
Bricks	156								156		156	23 40		23 40
Bones														
Brimstone														
Buckwheat														
Cement and water lime	4				17	18			21	18	39	3 15	3 60	6 75
Clay, lime and sand					95			15	95	15	110	14 25	3 00	17 25
Coal	8				45,032	992		1,360	45,040	2,352	47,392	9,008 00	470 40	9,478 40
Corn		618				60,545		102,346		163,509	163,509		16,350 90	16,350 90
Cattle														
Cotton, raw														
Crockery and earthenware	11								11		11	1 65		1 65
Dye wood and dye stuffs														
Fish					342				342		342	51 30		51 30
Flax and Hemp					470				470		470	70 50		70 50
Flour						7,966		990		8,956	8.956		1,791 20	1,791 20
Furniture			1		30			1	31	1	32	4 65	0 20	4 85
Gypsum														
Glass (all kinds)	20							10	20	10	30	3 00	2 00	5 00
Hay, pressed														
Hogs														
Horses			2		5	4			7	4	11	1 05	0 80	1 85
Hides and skins, horns and hoofs					51				51		51	7 65		7 56

Ice														
Iron, railway														
" pig								1,792		1,792	1,792		358 40	358 40
" all other	34		3		239	714		5,336	276	6,050	6,326	41 40	1,210 00	1,251 40
Iron ore								58,400		58,400	58,400		2,920 00	2,920 00
Kryolite chemical ore and other ore, except iron														
Lard and lard oil	9					1,588			9	1,588	1,597	1 35	317 60	318 95
Meal, all kinds						14,244				14,244	14,244		2,848 80	2,848 80
Meats, other than pork														
Marble					863				863		863	129 45		129 45
Manilla					174				174		174	26 10		26 10
Molasses					212	57		21	212	78	290	31 80	15 60	47 40
Nails	3								3		3	0 45		0 45
Oats	799					39,706		407	799	40,113	40,912	119 85	4,011 30	4,131 15
Oil (in barrels)	31	19,209	1		139	17		726	171	19,952	20,123	25 65	3,990 40	4,016 05
Oil cake						2,705				2,705	2,705		541 00	541 00
Pease		115				4				119	119		11 90	11 90
Potatoes														
Pork	20					117			20	117	137	3 00	23 40	26 40
Paint	6				20	36		2	26	38	64	3 90	7 60	11 50
Pitch and tar	2							24	2	24	26	0 30	4 80	5 10
Rags														
Rye		232				2,149		1,157		3,538	3,538		353 80	353 80
Flax seed														
Rosin														
Salt	1	229						238	1	467	468	0 15	93 40	93 55
Stone intended for cutting					21				21		21	3 15		3 15
" wrought														
" not suitable for cutting, unwrought														
Seeds, all kinds			11						11		11	1 65		1 65
Sheep														
Soda ash					61			15	61	15	76	9 15	3 00	12 15
Steel					122	3,110		4,911	122	8,021	8,143	18 30	1,604 20	1,622 50
Sugar	12				13,192	154			13,204	154	13,358	1,980 60	30 80	2,011 40
Spirits, beer, &c	47					1			47	1	48	7 05	0 20	7 25
Tobacco, raw														
Tallow					640	631			640	631	1,271	96 00	126 20	222 20
Tin														
Turpentine														
Wheat		87,621				18,771		29,655		136,047	136,047		13,604 70	13,604 70
White lead	1							16	1	16	17	15	3 20	3 35
Whiting														
Wool														
All other goods and merchandise not enumerated	290	52	47		37,744	7,899		205	38,081	8,156	46,237	5,712 15	1,631 20	7,343 35
Bark														
Barrels, empty		589			7	5			7	594	601	1 30	118 42	119 72
Boat Knees														

No. (A) 2.—GENERAL STATEMENT showing the Quantity of each Article of through Freight transported on the Welland Canal, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												$ cts.	$ cts.	$ cts.
Floats														
Fire wood, in vessels		1,143	1,256						1,296	1,143	2,439	86 40	76 20	162 60
" " rafts														
Hoops														
Hop Poles														
Lumber, sawn, in vessels	50	13,955		4,144		55,128		3,362	50	76,589	76,639	9 00	13,780 95	13,789 95
" " rafts														
Masts, spars, and telegraph poles, in vessels														
Masts, spars, and telegraph poles, in rafts														
Railway ties, in vessels														
" " rafts														
Saw logs														
Staves and headings, barrel		3								3	3		0 40	0 40
" " pipe														
" " West India														
Staves, salt barrel														
Shingles		90								90	90		64 68	64 68
Split posts and fence rails, in vessels														
Split posts and fence rails, in rafts														
Timber, square, in vessels	12	5,629			10			14,638	22	20,267	20,289	3 25	3,038 94	3,042 19
" " rafts														
Traverses														
Woodenware and wood partly manufactured	·2				69				71		71	28 40		28 40
Total freight paying tolls	1,527	129,497	1,947	4,144	99,560	218,969		226,702	108,034	579,312	682,346	17,618 55	69,767 29	87,385 84

Articles having paid full tolls on the St. Lawrence Canals, free :—														
Bricks	20	...	29	...	...	...	...	...	49	...	49	...	...	...
Cement and water lime	759	...	1,172	...	...	...	...	...	1,931	...	1,931	...	...	...
Clay, lime and sand	2	...	2	...	...	...	...	...	4	...	4	...	...	...
Crockery and earthenware	5	...	...	...	...	...	...	...	5	...	5	...	...	...
Fish	...	...	8	...	...	...	...	...	8	...	8	...	...	...
Furniture	...	...	1	...	...	...	...	...	1	...	1	...	...	...
Glass	14	...	442	...	...	...	...	...	456	...	456	...	...	...
Iron, railway	...	...	74	...	...	...	...	...	74	...	74	...	...	...
Iron, pig	...	...	3	...	...	...	...	...	3	...	3	...	...	...
Iron, all other	237	...	1,191	...	...	...	...	...	1,428	...	1,428	...	...	...
Nails	70	...	110	...	...	...	...	...	180	...	180	...	...	...
Oils	1	...	73	...	...	...	...	...	74	...	74	...	...	...
Paint	6	...	6	...	...	...	...	...	12	...	12	...	...	...
Pitch and tar	21	...	...	...	...	...	...	...	21	...	21	...	...	...
Pork	1	...	...	...	...	...	...	...	1	...	1	...	...	...
Salt	...	...	48	...	...	...	...	...	48	...	48	...	...	...
Seed	5	...	213	...	...	...	...	...	218	...	218	...	...	...
Soda ash	...	...	69	...	...	...	...	...	69	...	69	...	...	...
Sugar	130	...	300	...	...	...	...	...	430	...	430	...	...	...
Tin	...	...	117	...	...	...	...	...	117	...	117	...	...	...
White lead	2	...	2	...	...	...	...	...	4	...	4	...	...	...
Whiting	2	...	34	...	...	...	...	...	39	...	39	...	...	...
Whisky	8	...	287	...	...	...	...	...	295	...	295	...	...	...
Merchandise	198	...	546	...	...	...	...	...	744	...	744	...	...	...
Grand total through freight	3,011	129,497	6,674	4,144	99,560	218,969	...	226,702	109,245	579,312	688,557			
Total through tolls on vessels												6,816 66	6,875 82	13,692 48
" " passengers												50 00	53 55	103 55
" " free goods											$931.65	...	...	...
												24,485 21	76,696 66	101,181 87

RICHARD DEVLIN,
Compiler of Canal Statistics

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

APPENDIX A—*Continued.*

No. (A) 3.—General Statement showing the Quantity of each Article of Way Freight transported on the Welland Canal, and the Amount of Tolls Collected, during the Season of Navigation in 1900.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												$ cts.	$ cts.	$ cts.
Ashes, pot and pearl														
Apples		438								438	438		10 96	10 96
Agricultural products not enumerated, vegetables														
Agricultural products not enumerated, animal														
Agricultural implements														
Barley														
Bricks	140	30							140	30	170	13 89	3 93	17 82
Bones														
Brimstone														
Buckwheat														
Cement and water lime														
Clay, lime and sand	298							2,600	298	2,600	2,898	9 36	195 01	204 37
Coal														
Corn														
Cattle														
Cotton (raw)														
Crockery and earthenware														
Dye wood and dye stuffs														
Fish														
Flax and hemp														
Flour		2,012								2,012	2,012		86 35	86 35
Furniture		1								1	1		0 17	0 17
Gypsum														
Glass (all kinds)														
Hay (pressed)		1								1	1		0 18	0 18
Hogs														
Horses	24	25							24	25	49	0 46	0 63	1 09

Hides and skins, horns and hoofs														
Ice														
Iron, railway														
″ pig														
Iron, all other	12	60							12	60	72	0 23	1 50	1 73
Iron ore														
Kryolite chemical ore and other ore, except iron														
Lard and lard oil														
Meal, all kinds														
Meat, other than pork														
Marble														
Manilla														
Molasses														
Nails	8								8		8	0 15		0 15
Oats		143								143	143		21 63	21 63
Oil (in barrels)	2								2		2	0 04		0 04
Oil Cake														
Pease														
Potatoes		1								1	1		0 17	0 17
Pork														
Paint														
Pitch and tar	9								9		9	0 17		0 17
Rags	70								70		70	1 32		1 32
Rye														
Flax Seed														
Rosin	14								14		14	0 27		0 27
Salt								65		65	65		4 88	4 88
Stone intended for cutting														
″ wrought														
Stone, not suitable for cutting, unwrought	271								271		271	16 84		16 84
Seeds, all kinds														
Sheep														
Soda ash	9								9		9	0 17		0 17
Steel	60								60		60	1 15		1 15
Sugar	35								35		35	0 66		0 66
Spirits, beer, &c.														
Tobacco (raw)														
Tallow														
Tin														
Turpentine														
Wheat		1,753								1,753	1,753		204 51	204 51
White Lead														
Whiting														
Wool														
All other goods and merchandise not enumerated	1,955	2,310						2,400	1,955	4,710	6,665	37 89	238 40	276 29
Bark														

No. (A) 3.—GENERAL STATEMENT showing the Quantity of each Article of Way Freight transported on the Wellaed Canal, and the Amount of Tolls Collected, during the Season of Navigation in 1900.—*Continued.*

Articles.	F.om Canadian to Canadion Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
											$ cts.	$ cts.	$ cts.	$ cts.
Barrels, empty	30	30						16	30	46	76	0 75	2 35	3 10
Boat knees														
Floats														
Fire wood, in vessels	405	4,674	375						780	4,674	5,454	6 51	252 25	258 76
" " rafts														
Hoops														
Hop poles														
Lumber, sawn, in vessels	22	803							22	803	825	2 54	90 22	92 76
" " Rafts		4								4	4		0 30	0 30
Masts, spars, and telegraph poles, in vessels	9								9		9	1 80		1 80
Masts, spars, and telegraph poles, Rafts	6								6		6	0 65		0 65
Railway ties, in vessels	1,563								1,563		1,563	124 88		124 88
" " rafts														
Saw logs	415	3,507	2,999	161					3,414	3,668	7,082	69 24	209 32	278 56
Staves and headings, barrel		738		39						777	777		37 01	37 01
" "														
" " West India														
Staves, salt barrel														
Shingles		7								7	7		2 81	2 81
Split posts and fence rails, in vessels														
Split posts and fence rails, in rafts														
Timber, square, in vessels	30								30		30	0 57		0 57
" " rafts														
Traverses														
Woodenware and wood partly manufactured														
Total freight paying tolls	5,387	16,537	3,374	200				5,081	8,761	21,818	30,579	289 54	1,362 58	1,652 12

Articles having paid full tolls on St. Lawrence Canals, free:—														
Clay, lime and sand	112	....	....	....	....	....	....	....	112	....	112			
Iron, all other	41	....	....	....	....	....	....	....	41	....	41			
Merchandise	16	....	....	....	....	....	....	....	16	....	16			
Nails	13	....	....	....	....	....	....	....	13	....	13			
Sugar	42	....	....	....	....	....	....	....	42	....	42			
Grand total way freight	5,611	16,537	3,374	200	....	....	....	5,081	8,985	21,818	30,803			
Total way tolls on vessels												356 33	349 20	705 53
" " passengers												278 08	299 36	577 44
" " free goods											$4.22	....	....	....
Total way tolls												923 95	2,011 14	2,935 09

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

APPENDIX A—*Continued.*

No. (A) 4—General Statement showing the Quantity of each Article transported on the St. Lawrence Canals and the Amount of Revenue collected during the Season of Navigation in 1900.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												$ cts.	$ cts.	$ cts.
Ashes, pot and pearl	80	34							80	34	114	16 00	6 80	22 80
Apples	7	4,632							7	4,632	4,639	0 70	675 21	675 91
Agricultural products not enumerated, vegetables	202	1,387	55						257	1,387	1,644	31 49	206 73	238 22
" " animal	1,290	1,780							1,290	1,780	3,070	72 34	242 53	314 87
Agricultural implements	55	12							55	12	67	7 49	0 90	8 39
Barley	210	19,598							210	19,598	19,808	5 69	1,324 89	1,330 58
Bricks	12,654	403	59				45		12,758	403	13,161	853 38	15 13	868 51
Bones		357								357	357		47 82	47 82
Brimstone	622		131						753		753	74 61		74 61
Buckwheat	131	1,028							131	1,028	1,159	3 28	58 86	62 14
Cement and water lime	5,714	352	651				190		6,555	352	6,907	802 30	25 91	828 21
Clay, lime and sand	11,753	20,548	9				2,451		14,213	20,548	34,761	591 37	928 86	1,520 23
Coal		127,310				672		179,415		307,397	307,397		43,941 82	43,941 82
Corn	240	172,923						1,691	240	174,614	174,854	6 08	4,566 91	4,572 99
Cattle	22	264							22	264	286	1 74	20 03	21 77
Cotton (raw)														
Crockery and earthenware	73	12							73	12	85	12 34	2 40	14 74
Dye wood and dye stuffs	4						14		18		18	1 40		1 40
Fish	50	1	8						58	1	59	7 72	0 15	7 87
Flax and hemp		941								941	941		23 53	23 53
Flour	576	11,106							576	11,106	11,682	35 62	771 90	807 52
Furniture	457	1,126	1						458	1,126	1,584	83 43	194 35	277 78
Gypsum	1,414								1,414		1,414	17 69		17 69
Glass (all kinds)	493	72	449						942	72	1,014	175 34	12 70	188 04
Hay (pressed)	825	466		701					825	1,167	1,992	31 03	114 61	145 64
Hogs	1	41							1	41	42	0 08	3 19	3 27
Horses	195	362							195	362	557	10 41	23 58	33 99
Hides and skins, horns and hoofs	26	18							26	18	44	2 93	0 80	3 73

Ice														
Iron, railway	142	233	74				54		270	233	503	20 03	9 46	29 49
" pig	257	852	3				681		941	852	1,793	56 13	110 82	166 95
" all other	4,457	1,266	979				548		5,984	1,266	7,250	644 35	123 40	767 75
Iron ore														
Kryolite, chemical ore and other ore, except iron		307								307	307		34 54	34 54
Lard and lard oil	99	2,004							99	2,004	2,103	11 62	125 47	137 09
Meal, all kinds	92	508							92	508	600	5 82	31 79	37 61
Meats, other than pork	5	6							5	6	11	0 50	0 90	1 40
Marble														
Manilla	33								33		33	6 54		6 54
Molasses	312	174							312	174	486	49 65	8 70	58 35
Nails	546	272	83						629	272	901	116 74	18 85	135 59
Oats	1,315	42,743							1,315	42,743	44,058	33 89	1,581 58	1,615 47
Oil (in barrels)	2,134	255	111				76		2,321	255	2,576	213 51	37 95	251 46
Oil Cake														
Pease	7	11,099							7	11,099	11,106	0 18	1,045 10	1,045 28
Potatoes	69	18							69	18	87	2 71	1 32	4 03
Pork	205	489							205	489	694	19 88	31 15	51 03
Paint	251	102	7				34		292	102	394	50 85	11 30	62 15
Pitch and tar	163	119					196		359	119	478	40 75	20 05	60 80
Rags	453	144							453	144	597	68 60	16 70	85 30
Rye		9,085						381		9,466	9,466		645 95	645 95
Flax seed		3,779								3,779	3,779		94 96	94 96
Rosin	27	18					1,665		1,692	18	1,710	86 13	0 90	87 03
Salt	2,903	92	119						3,022	92	3,114	358 37	3 50	361 87
Stone intended for cutting,	278	22					765		1,043	22	1,065	39 82	0 84	40 66
" wrought	4	265							4	265	269	0 40	50 57	50 97
" not suitable for cutting, unwrought	30	2,412							30	2,412	2,442	0 60	64 20	64 80
Seeds, all kinds	2,993	53	140						3,133	53	3,186	156 36	5 03	161 39
Sheep		105								105	105		8 10	8 10
Soda ash	384		134				32		550		550	103 15		103 15
Steel	419	17							419	17	436	54 91	1 66	56 57
Sugar	3,727	54	383				561		4,671	54	4,725	792 75	4 80	797 55
Spirits, beer, &c	279	156	281						560	156	716	103 29	27 70	130 99
Tobacco (raw)	21	134							21	134	155	2 10	10 05	12 15
Tallow	5	374							5	374	379	0 75	18 80	19 55
Tin	1,082	2	160						1,242	2	1,244	245 70	0 40	246 10
Turpentine	1	2					273		274	2	276	13 85	0 10	13 95
Wheat	2,360	149,076						2,222	2,360	151,298	153,658	109 32	4,907 04	5,016 36
White lead	62	17							62	17	79	12 03	0 85	12 88
Whiting	757	3	34						791	3	794	150 39	0 15	150 54
Wool	2	2							2	2	4	0 08	0 30	0 38
All other goods and merchandise not enumerated	9,209	5,494	889		288	505	810	41	11,196	6,040	17,236	1,658 52	825 70	2,484 22
riar.														
Barrels (empty)	596	132							596	132	728	49 41	9 03	58 44

No. (A) 4.—General Statement showing the Quantity of each Article transported on the St. Lawrence Canals, and the Amount of Revenue Collected, during the Season of Navigation of 1900.—*Concluded*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												$ cts.	$ cts.	$ cts.
Boat knees														
Floats	45	4							45	4	49	0 79	0 07	0 86
Fire wood, in vessels	3,336	5,322						75	3,336	5,397	8,733	55 60	109 95	165 55
" " rafts														
Hoops	1	1							1	1	2	0 10	0 15	0 25
Hop poles		84								84	84		0 50	50
Lumber, sawn, in vessels	33,395	6,211	2,827	4				367	36,222	6,582	42,804	1,543 73	211 76	1,755 49
" " rafts	17	962							17	962	979	0 75	42 05	42 80
Masts, spars, and telegraph poles, in vessels	5								5		5	0 13		0 13
Masts, spars, and telegraph poles, in rafts		20,487								20,487	20,487		512 30	512 33
Railway ties, in vessels	126	44							126	44	170	5 00	0 88	5 88
" " rafts														
Saw logs	9	566							9	566	575	0 25	12 86	13 11
Staves and headings, barrel														
" " pipe														
" " West India														
Staves, salt barrel														
Shingles		25								25	25		4 50	4 50
Split posts and fence rails, in vessels		1			2				2	1	3	0 20	0 10	0 30
Split posts and fence rails, in rafts														
Timber, square, in vessels	10	488						150	10	638	648	0 13	8 94	9 07
" " rafts	700	4,394							700	4,394	5,094	17 50	110 05	127 55
Traverses		100								100	100		1 25	1 25
Woodenware and wood partly manufactured	51	9							51	9	60	16 00	1 80	17 80
Total freight paying tolls.	100,468	635,856	7,587	705	290	1,177	8,395	184,342	126,740	821,580	948,320	9,764 32	64,116 48	73,880 80

Free Articles, having paid full tolls on the Welland Canal:														
Ashes		15						10		25	25			
Barley		1,084						204		1,288	1,288			
Barrels		182								182	182			
Clay, lime and sand								15		15	15			
Corn		92,211						21,104		113,315	113,315			
Flour		605						990		1,595	1,595			
Furniture								1		1	1			
Glass								6		6	6			
Iron (pig)		508								508	508			
" (all other)		50						4,242		4,292	4,292			
Kryolite								42		42	42			
Lumber, sawn, in vessels		15,073						687		15,760	15,760			
Merchandise		16						87		103	103			
Oats		1,020						7,905		8,925	8,925			
Oils		15,330						317		15,647	15,647			
Pease		115								115	115			
Rye		831						2,247		3,078	3,078			
Steel		880						4,540		5,420	5,420			
Wheat		112,226						10,345		122,571	122,571			
White head								16		16	16			
Coal, free, per Order in Council	57,714						9,441		67,155		67,155			
Free articles for canal construction, O.C., 1884:														
Coal								687		687	687			
Grand total, freight	168,182	875,502	7,587	705	290	1,177	17,836	237,787	193,895	1,115,171	1,309,066			

Total tolls on vessels	10,990 46	8,396 54	19,387 00
" passengers	1,106 42	2,532 36	3,638 78
" free goods $34,758.81			
Total tolls	21,861 20	75,045 38	96,906 58
Fines			34 00
*Damages			
Wharfage and storage			1,420 52
Other receipts			5,011 74
Total revenue, exclusive of hydraulic rents			103,372 84

*Amount of damages not included in above, $115.

Department of Railways and Canals,
Ottawa, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

APPENDIX A—*Continued.*

No. (A) 5.—**General Statement** showing the Quantity of each Through Article transported on the St. Lawrence Canals, and the Amount of Tolls collected during the Season of Navigation of 1900.

Articles	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												$ cts.	$ cts.	$ cts.
Ashes, pot and pearl	80	34							80	34	114	16 00	6 80	22 80
Apples		4,451								4,451	4,451		667 65	667 65
Agricultural products not enumerated, vegetables	114	1,375	55						169	1,375	1,544	25 35	206 25	231 60
Agricultural products not enumerated, animal	56	1,487							56	1,487	1,543	8 40	223 05	231 45
Agricultural implements	1	1							1	1	2	0 20	0 20	0 40
Barley		11,130								11,130	11,130		1,113 00	1,113 00
Bricks	2,394		59						2,453		2,453	367 95		367 95
Bones		14								14	14		2 10	2 10
Brimstone	27		131						158		158	23 70		23 70
Buckwheat		434								434	434		43 40	43 40
Cement and water lime	3,124	14	651						3,775	14	3,789	566 25	2 10	568 35
Clay, lime and sand	380	865	9						389	865	1,254	58 35	129 75	188 10
Coal		117,222						162,947		280,169	280,169		42,025 35	42,025 35
Corn		976						1,691		2,667	2,667		266 70	266 70
Cattle	3								3		3	0 45		0 45
Cotton (raw)														
Crockery and eartheware	36	12							36	12	48	7 20	2 40	9 60
Dye wood and dye stuffs	3								3		3	0 60		0 60
Fish	32	1	8						40	1	41	6 00	0 15	6 15
Flax and Hemp														
Flour	7	2,220							7	2,220	2,227	1 05	333 00	334 05
Furniture	329	875	1						330	875	1,205	66 00	175 00	241 00
Gypsum														
Glass (all kinds)	294	55	449						743	55	798	148 60	11 00	159 60
Hay (pressed)		1								1	1		0 15	0 15
Hogs														
Horses		67								57	57		8 55	8 55

Hids and skins, horns and hoofs	12	1							12	1	13	1 80	0 15	1 95
Ice														
Iron, railway	5		74						79		79	11 85		11 85
" pig	140	701	3						143	701	844	21 45	105 15	126 60
" all other	2,511	647	979						3,490	647	4,137	523 50	97 05	620 55
Iron Ore														
Kryolite chemical ore and other ore, except iron														
Lard and lard oil	36	258							36	258	294	5 40	38 75	44 15
Meal, all kinds	6	70							6	70	76	0 90	10 50	11 40
Meats, other than pork		6								6	6		0 90	0 90
Marble														
Manilla	27								27		27	5 40		5 40
Molasses	14								14		14	2 80		2 80
Nails	327	35	83						410	35	445	82 00	7 00	89 00
Oats		6,367								6,367	6,367		636 70	636 70
Oil (in barrels)	405	168	111						516	168	684	103 20	33 60	136 80
Oil cake														
Pease		10,222								10,222	10,222		1,022 20	1,022 20
Potatoes														
Pork	1	67							1	67	68	0 15	10 05	10 20
Paint	195	41	7						202	41	243	40 40	8 20	48 60
Pitch and tar	97	94							97	94	191	19 40	18 80	38 20
Rags	46	29							46	29	75	9 20	5 80	15 00
Rye		5,076						381		5,457	5,457		545 70	545 70
Flax seed														
Rosin														
Salt	980		119						1,099		1,099	164 85		164 85
Stone intended for cutting														
Stone wrought		250								250	250		50 00	50 00
" not suitable for cutting, unwrought		322								322	322		22 65	22 65
Seeds, all kinds	187	24	140						327	24	351	49 05	3 60	52 65
Sheep														
Soda ash	359		134						493		493	98 60		98 60
Steel	327	9							327	9	336	49 05	1 35	50 40
Sugar	2,740	14	383						3,123	14	3,137	624 60	2 80	627 40
Spirits, beer, &c	83	132	281						364	132	496	72 80	26 40	99 20
Tobacco (raw)														
Tallow	5	1							5	1	6	0 75	0 15	0 90
Tin	1,028	2	160						1,188	2	1,190	237 60	0 40	238 00
Turpentine	1								1		1	0 20		0 20
Wheat		12,768						2,222		14,990	14,990		1,499 00	1,499 00
White Lead	43								43		43	8 60		8 60
Whiting	669		34						703		703	140 60		140 60
Wool		2								2	2		0 30	0 30
All other goods and merchandise not enumerated	4,915	2,996	871					5	5,786	3,001	8,787	1,157 20	600 20	1,757 40
Bark														

No. (A) 5.—General Statement showing the Quantity of each Through Article transported on the St. Lawrence Canals, and the Amount of Tolls collected during the Season of Navigation in 1900.—*Continued.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												$ cts.	$ cts.	$ cts.
Barrels, empty	123								123		123	23 32		23 32
Boat knees														
Floats														
Fire wood, in vessels														
" " rafts														
Hoops														
Hop Poles														
Lumber, sawn, in vessels	210	234	2,827					367	3,037	601	3,638	273 30	54 00	327 30
" " rafts														
Masts, spars, and telegraph poles, in vessels														
Masts, spars, and telegraph poles, in rafts														
Railway ties, in vessels														
" " rafts														
Saw logs														
Staves and headings, barrel														
" " pipe														
" " West India														
Staves, salt barrel														
Shingles														
Split posts and fence rails, in vessels														
Split posts and fence rails, in rafts														
Timber, square, in vessels		1								1	1		0 33	0 33
" " rafts														
Traverses														
Woodenware and wood partly manufactured	28								28		28	11 20		11 20
Total freight paying tolls	22,400	181,761	7,569					167,613	29,969	349,374	379,343	5,035 27	50,018 33	55,053 60

Free articles having paid full tolls on the Welland Canal:													
Ashes		15						10		25	25		
Barley		1,084						204		1,288	1,288		
Clay, lime and sand								15		15	15		
Corn		88,255						21,104		109,359	109,359		
Flour		605						990		1,595	1,595		
Furniture								1		1	1		
Glass								6		6	6		
Iron, pig		508								508	508		
" all other		50						4,242		4,292	4,292		
Merchandise		16						87		103	103		
Oats		1,020						7,905		8,925	8,925		
Oils		15,330						317		15,647	15,647		
Pease		115								115	115		
Rye		831						2,247		3,078	3,078		
Steel		880						4,540		5,420	5,420		
Wheat		111,551						10,345		121,896	121,896		
White lead								16		16	16		
Barrels (empty)		182								182	182		
Lumber, sawn, in vessels		15,073						687		15,760	15,760		
Coal, free per Order in Council	10								10		10		
Grand total freight	22,410	417,276	7,569					220,329	667,584	29,979	667,584		

Total tolls on vessels		6,533 05	5,909 56	12,442 61
" passengers		602 55	1,796 30	2,398 85
" free goods	$30,864.41			
Total through tolls		12,170 87	57,724 19	69,895 06

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

APPENDIX A—*Continued.*

No. (A) 6.—General Statement showing the Quantity of each Article of Way Freight transported on the St. Lawrence Canals, and the Amount of Tolls collected during the Season of Navigation in 1900.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												$ cts.	$ cts.	$ cts.
Ashes, pot and pearl														
Apples	7	181							7	181	188	0 70	7 56	8 26
Agricultural products not enumerated, vegetables	88	12							88	12	100	6 14	0 48	6 62
Agricultural products not enumerated, animal	1,234	293							1,234	293	1,527	63 94	19 48	83 42
Agricultural implements	54	11							54	11	65	7 29	0 70	7 99
Barley	210	8,468							210	8,468	8,678	5 69	211 89	217 58
Bricks	10,260	403					45		10,305	403	10,708	485 43	15 13	500 56
Bones		343								343	343		45 72	45 72
Brimstone	595								595		595	50 91		50 91
Buckwheat	131	594							131	594	725	3 28	15 46	18 74
Cement and water lime	2,590	338					190		2,780	338	3,118	236 05	23 81	259 86
Clay, lime and sand	11,373	19,683					2,451		13,824	19,683	33,507	533 02	799 11	1,332 13
Coal		10,088				672		16,468		27,228	27,228		1,916 47	1,916 47
Corn	240	171,947							240	171,947	172,187	6 08	4,300 21	4,306 29
Cattle	19	264							19	264	283	1 29	20 03	21 32
Cotton (raw)														
Crockery and earthenware	37								37		37	5 14		5 14
Dye wood and dye stuffs	1						14		15		15	0 80		0 80
Fish	18								18		18	1 72		1 72
Flax and hemp		941								941	941		23 53	23 53
Flour	569	8,886							569	8,886	9,455	34 57	438 90	473 47
Furniture	128	251							128	251	379	17 43	19 35	36 78
Gypsum	1,414								1,414		1,414	17 69		17 69
Glass, all kinds	199	17							199	17	216	26 74	1 70	28 44
Hay, pressed	825	465		701					825	1,166	1,991	31 03	114 46	145 49
Hogs	1	41							1	41	42	0 08	3 19	3 27
Horses	195	305							195	305	500	10 41	15 03	25 44

Hides and skins, horns and hoofs	14	17							14	17	31	1 13	0 65	1 78
Ice														
Iron, railway	137	233					54		191	233	424	8 18	9 46	17 64
Iron, pig	117	151					681		798	151	949	34 68	5 67	40 35
Iron, all other	1,946	619					548		2,494	619	3,113	120 85	26 35	147 20
Iron ore														
Kryolite chemical ore and other ore, except iron		307								307	307		34 54	34 54
Lard and lard oil	63	1,746							63	1,746	1,809	6 22	86 72	92 94
Meal, all kinds	86	438							86	438	524	4 92	21 29	26 21
Meats, other than pork	5								5		5	0 50		0 50
Marble														
Manilla	6								6		6	1 14		1 14
Molasses	298	174							298	174	472	46 85	8 70	55 55
Nails	219	237							219	237	456	34 74	11 85	46 59
Oats	1,315	36,376							1,315	36,376	37,691	33 89	944 88	978 77
Oil, in barrels	1,729	87					76		1,805	87	1,892	110 31	4 35	114 66
Oil cake														
Pease	7	877							7	877	884	0 18	22 90	23 08
Potatoes	69	18							69	18	87	2 71	1 32	4 03
Pork	204	422							204	422	626	19 73	21 10	40 83
Paint	56	61					34		90	61	151	10 45	3 10	13 55
Pitch and tar	66	25					196		262	25	287	21 35	1 25	22 60
Rags	407	115							407	115	522	59 40	10 90	70 30
Rye		4,009								4,009	4,009		100 25	100 25
Flax seed		3,779								3,779	3,779		94 96	94 96
Rosin	27	18					1,665		1,692	18	1,710	86 13	0 90	87 03
Salt	1,923	92							1,923	92	2,015	193 52	3 50	197 02
Stone intended for cutting	278	22					765		1,043	22	1,065	39 82	0 84	40 66
Stone, wrought	4	15							4	15	19	0 40	0 57	0 97
Stone not suitable for cutting, unwrought	30	2,090							30	2,090	2,120	0 60	41 55	42 15
Seeds, all kinds	2,806	29							2,806	29	2,835	107 31	1 43	108 74
Sheep		105								105	105		8 10	8 10
Soda ash	25						32		57		57	4 55		4 55
Steel	92	8							92	8	100	5 86	0 31	6 17
Sugar	987	40					561		1,548	40	1,588	168 15	2 00	170 15
Spirits, beer, &c.	196	24							196	24	220	30 49	1 30	31 79
Tobacco, raw	21	134							21	134	155	2 10	10 05	12 15
Tallow		373								373	373		18 65	18 65
Tin	54								54		54	8 10		8 10
Turpentine		2					273		273	2	275	13 65	0 10	13 75
Wheat	2,360	136,308							2,360	136,308	138,668	109 32	3,408 04	3,517 36
White lead	19	17							19	17	36	3 43	0 85	4 28
Whiting	88	3							88	3	91	9 79	0 15	9 94
Wool	2								2		2	0 08		0 08
All other goods and merchandise not enumerated	4,294	2,498	18		288	505	810	36	5,410	3,039	8,449	501 32	225 50	726 82
Bark														

No. (A) 6.—GENERAL STATEMENT showing the Quantity of each Article of Way Freight transported on the St. Lawrence Canals, and the Amount of Tolls collected during the Season of Navigation in 1900—*Continued.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												$ cts.	$ cts.	$ cts.
Barrels, empty	473	132							473	132	605	26 09	9 03	35 12
Boat knees														
Floats	45	4							45	4	49	0 79	0 07	0 86
Fire wood, in vessels	3,336	5,322						75	3,336	5,397	8,733	55 60	109 95	165 55
" " rafts														
Hoops	1	1							1	1	2	0 10	0 15	0 25
Hop poles		84								84	84		0 50	0 50
Lumber, sawn, in vessels	33,185	5,977		4					33,185	5,981	39,166	1,270 43	157 76	1,428 19
Lumber, sawn, in rafts	17	962							17	962	979	0 75	42 05	42 80
Masts, spars and telegraph poles, in vessels	5								5		5	0 13		0 13
Masts, spars and telegraph poles, in rafts		20,487								20,487	20,487		512 30	512 30
Railway ties, in vessels	126	44							126	44	170	5 00	0 88	5 88
" " rafts														
Saw logs	9	566							9	566	575	0 25	12 86	13 11
Staves and headings, barrel														
" " pipe														
" " West India														
Staves, salt barrel														
Shingles		25								25	25		4 50	4 50
Split posts and fence rails, in vessels		1			2				2	1	3	0 20	0 10	0 30
Split posts and fence rails, in rafts														
Timber, square, in vessels	10	487						150	10	637	647	0 13	8 61	8 74
Timber, square, in rafts	700	4,394							700	4,394	5,094	17 50	110 05	127 55
Traverses		100								100	100		1 25	1 25
Woodenware and wood partly manufactured	23	9							23	9	32	4 80	1 80	6 60
Total freight paying tolls	88,068	453,595	18	705	290	1,177	8,395	16,729	96,771	472,206	568,977	4,729 05	14,098 15	18,827 20

Free articles having paid full tolls on the Welland Canal:														
Corn		3,956								3,956	3,956			
Kyrolite								42		42	42			
Wheat		675								675	675			
Coal, free, per Order in Council	57,704						9,441		67,145		67,145			
Free articles for canal construction, O. C., 1884:														
Coal								687		687	687			
Grand total way freight	145,772	458,226	18	705	290	1,177	17,836	17,458	163,916	477,566	641,482			
Total way tolls on vessels												4,457 41	2,486 98	6,944 39
" " passengers												503 87	736 06	1,239 93
" " free goods											$3,894 40			
Total way tolls												9,690 33	17,321 19	27,011 52

Department of Railways and Canals,
Ottawa, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

APPENDIX A—*Continued.*

No. (A) 7.—General Statement showing the Quantity of each Article transported on the Ottawa Canals, and the Amount of Revenue collected during the Season of Navigation in 1900.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States. Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amoun of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Dp.	Down.	Up.	Down.		
												cts.
Ashes, pot and pearl		8								8	8	1 52
Apples		36								36	36	2 40
Agricultural products not enumerated, vegetables		17								17	17	1 42
" " animal	14	2,196							14	2,196	2,210	195 01
Agricultural implements		2								2	2	0 38
Barley		2								2	2	0 12
Bricks												
Bones		12								12	12	0 72
Brimstone												
Buckwheat		117								117	117	11 44
Cement and water lime	100	33							100	33	133	7 29
Clay, lime and sand		1,900								1,900	1,900	47 01
Coal												
Corn												
Cattle		448								448	448	35 20
Cotton (raw)												
Crockery and earthenware												
Dye wood and dye stuffs												
Fish		3								3	3	0 18
Flax and hemp												
Flour		11								11	11	1 09
Furniture	2	10							2	10	12	1 91
Gypsum												
Glass (of all kinds)		10								10	10	1 90
Hay (pressed)		1,170								1,170	1,170	108 99
Hogs		119								119	119	9 40
Horses	17	138							17	138	155	7 07
Hides and skins, horns and hoofs		7								7	7	0 46
Ice												

Iron, railway	4	426							4	426	430	12 98
" pig	100								100		100	2 00
" all other		36								36	36	2 42
Iron ore												
Kryolite chemical ore and other ore, except iron												
Lard and lard oil		4								4	4	0 08
Meal, all kinds		1								1	1	0 06
Meats, other than pork												
Marble												
Manilla		1								1	1	0 19
Molasses		3								3	3	0 57
Nails												
Oats		1,752								1,752	1,752	133 75
Oil (in barrels)		2								2	2	0 38
Oil cake		5								5	5	0 49
Pease		91								91	91	6 63
Potatoes		114								114	114	7 22
Pork		20								20	20	1 20
Paint		4								4	4	0 76
Pitch and tar		33								33	33	6 27
Rags		41								41	41	7 52
Rye		3								3	3	0 30
Flax seed												
Rosin												
Salt												
Stone intended for cutting												
" wrought												
" not suitable for cutting, unwrought												
Seeds, all kinds		4								4	4	0 40
Sheep		269								269	269	23 55
Soda Ash												
Steel												
Sugar												
Spirits, Beea, &c												
Tobacco (raw												
Tallow		17								17	17	1 64
Tin		1								1	1	0 19
Turpentine												
Wheat												
White lead		1								1	1	0 19
Whiting												
Wool												
All other goods and merchandise not enumerated	2	982							2	982	984	126 83
Bark												
Barrels, empty		56								56	56	6 43
Boat knees												
Floats		31,805								31,805	31,805	267 48
Firewood, in vessels		11,292								11,292	11,292	316 58
" rafts		440								440	440	10 31
Hoops		3								3	3	0 26

No. (A) 7.—**General Statement** showing the Quantity of each Article transported on the Ottawa Canals, and the Amount of Revenue Collected, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Up.	Up.	Down.		
												$ cts.
Hop poles												
Lumber, sawn, in vessels		260,701		41,151						301,852	301,852	21,101 55
" rafts		230								230	230	1 80
Masts, spars and telegraph poles, in vessels												
" " rafts												
Railway ties, in vessels		1,192								1,192	1,192	213 81
" " rafts												
Saw logs		3,859								3,859	3,859	83 88
Staves and heading, barrel												
" " pipe												
" " West India												
Staves, salt barrel												
Shingles		13		17						30	30	17 78
Split posts and fence rails, in vessels												
" " rafts												
Timber, square, in vessels		1,244								1,244	1,244	15 32
" rafts		4,500								4,500	4,500	47 22
Traverses												
Woodenware and wood partly manufactured												
Total freight paying tolls	239	325,384		41,168					239	366,552	366,791	22,851 55
Free per Order in Council, June 27, 1890.												
Floats		12,764								12,764	12,764	
Firewood, in rafts	60	600							60	600	660	
Lumber, sawn, in rafts		50								50	50	
Timber, square "		6,800								6,800	6,800	
Saw logs		2,080								2,080	2,080	
Freight, grand total	299	347,678		41,168					299	388,846	389,145	

Total tolls on vessels		2,602 63
" passengers		171 10
" free goods	$235 43	
Total revenue exclusive of hydraulic rents		25,625 28

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

APPENDIX A—*Continued.*

No. (A) 8.—General Statement showing the Quantity of each Article transported on the Chambly Canal, and the Amount of Revenue collected during the Season of Navigation in 1900.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												$ cts.
Ashes, pot and pearl												
Apples		345						92		437	437	25 02
Agricultural products not enumerated, vegetables												
" " " animal												
Agricultural implements												
Barley		48								48	48	1 61
Bricks	118							709	118	709	827	80 91
Bones												
Brimstone												
Buckwheat												
Cement and water lime								822		822	822	82 20
Clay, lime and sand	190							4,591	190	4,591	4,781	511 31
Coal		330						92,268		92,598	92,598	9,072 90
Corn												
Cattle	1	90							1	90	91	3 24
Cotton (raw)												
Crockery and earthenware		18						5		23	23	2 30
Dye wood and dye stuffs								25		25	25	2 50
Fish												
Flax and hemp												
Flour	524								524		524	17 78
Furniture												
Gypsum												
Glass (all kinds)								17		17	17	161
Hay (pressed)	1,864	1,781	15,389	68				105	17,253	1,954	19,207	1,495 82
Hogs												
Horses	5	47						1	5	48	53	1 94
Hides and skins, horns and hoofs												
Ice												
Iron, railway												

" pig								861		861	861	86 10
" all other	174							1,531	174	1,531	1,705	165 02
" ore												
Kryolite chemical ore and other ore, except iron												
Lard and lard oil								11		11	11	1 10
Meal, all kinds												
Meats, other than pork												
Marble												
Manilla												
Molasses	86								86		86	2 93
Nails												
Oats		3,867								3,867	3,867	129 07
Oil (in barrels)	47							65	47	65	112	8 19
Oil cake												
Pease		77								77	77	2 60
Potatoes		62								62	62	2 17
Pork												
Paint								66		66	66	6 51
Pitch and tar								1,770		1,770	1,770	177 00
Rags												
Rye												
Flax seed												
Rosin								1,954		1,954	1,954	195 40
Salt	192							313	192	313	505	37 75
Stone intended for cutting												
" wrought		54								54	54	0 88
" not suitable for cutting, unwrought								5,385		5,385	5,385	316 13
Seeds (all kinds)	28		1					1	29	1	30	1 17
Sheep		123								123	123	4 24
Soda ash								181		181	181	13 14
Steel								157		157	157	15 70
Sugar	7							928	7	928	935	93 04
Spirits, beer, &c												
Tobacco (raw)												
Tallow												
Tin												
Turpentine								273		273	273	27 30
Wheat												
White lead												
Whiting												
Wool												
All other goods and merchandise not enumerated	1,104	468	2,586				25	1,508	3,715	1,976	5,691	450 71
Bark												
Barrels, empty	10	33							10	33	43	4 32
Boat knees												
Floats												
Fire wood, in vessels		1,086	161,178						161,178	1,086	162,264	5,429 68
" rafts												
Hoops												
Hop poles												

No. (A) 8.—**General Statement** showing the Quantity of each Article transported on the Chambly Canal, and the Amount of Revenue Collected, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down,	Up.	Down.		
												$ cts.
Lumber, sawn, in vessels		39	39,596						39,596	39	39,635	2,315 61
" " rafts												
Masts, spars, and telegraph poles, in vessels												
" " " " rafts												
Railway ties, in vessels			3,261						3,261		3,261	260 41
" " raft												
Saw logs												
Staves and headings, barrel												
" " pipe												
" " West India												
Staves, salt barrel												
Shingles												
Split posts and fence rails, in vessels												
" " " rafts												
Timber, square, in vessels												
" " rafts												
Traverses												
Woodenware and wood partly manufactured												
Total freight paying tolls	4,350	8,468	222,011	68			25	113,639	226,386	122,175	348,561	21,045 31
Total tolls on vessels												3,128 63
" " passengers												32 41
" fines												14 00
Total revenue exclusive of hydraulic rents												24,220 35

Department of Railways and Canals,
Ottawa, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

APPENDIX A—*Continued.*

No. (A) 9.—**General Statement** showing the Quantity of each Article transported on the Rideau Canal, and the Amount of Revenue collected during the Season of Navigation in 1900.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												$ cts.
Ashes, pot and pearl		15								15	15	2 56
Apples	2	157							2	157	159	3 86
Agricultural products not enumerated, vegetables	12	1							12	1	13	0 33
" " animal	303	779							303	779	1,082	29 20
Agricultural implements	37	102							37	102	139	15 29
Barley												
Bricks	1,393	288							1,393	288	1,681	39 52
Bones	3	8							3	8	11	0 48
Brimstone												
Buckwheat		63								63	63	2 70
Cement and waterlime	1,168	17							1,168	17	1,185	28 98
Clay, lime and sand	7,577	2							7,577	2	7,579	177 01
Coal		2,336						14,956		17,292	17,292	648 04
Corn	10	137							10	137	147	3 51
Cattle		2								2	2	0 06
Cotton (raw)												
Crockery and earthenware	3	12							3	12	15	1 34
Dye wood and dye stuffs												
Fish	11								11		11	0 28
Flax and hemp												
Flour	80	390							80	390	470	11 83
Furniture	25	23							25	23	48	4 40
Gypsum		109								109	109	2 59
Glass (all kinds)	42	12							42	12	54	4 84
Hay (pressed)	382	22							382	22	404	9 76
Hogs												
Horses	4	5							4	5	9	0 27
Hides and skins, horns and hoofs	4	1							4	1	5	0 15
Ice												
Iron, railway	5								5		5	0 24
" pig	22								22		22	0 53

No. (A) 9.—GENERAL STATEMENT showing the Quantity of each Article transported on the Rideau Canal, &c—*Continued.*

Articles.	From Canadian to Canadian Ports,		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Dowh.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												$ cts.
Iron, all other	304	190							304	190	494	12 41
" ore												
Kryolite chemical ore and other ore, except iron	10	5							10	5	15	0 75
Lard and lard oil	38	3							38	3	41	1 06
Meal, all kinds	4	119							4	119	123	3 02
Meats, other than pork	6								6		6	0 15
Marble												
Manilla	7								7		7	0 63
Molasses	120	1							120	1	121	10 59
Nails	109	1							109	1	110	10 94
Oats	225	445							225	445	670	25 23
Oil (in barrels)	140	58							140	58	198	17 65
" cake												
Pease												
Potatoes	3	2							3	2	5	0 18
Pork	102	7							102	7	109	2 71
Paint	35	3							35	3	38	3 60
Pitch and tar	46	10							46	10	56	5 37
Rags	2	32							2	32	34	4 00
Rye	28								28		28	0 66
Flax seed												
Rosin												
Salt	1,001	260							1,001	260	1,261	32 52
Stone intended for cutting												
" wrought												
" not suitable for cutting, unwrought												
Seeds, all kinds	30	4							30	4	34	0 85
Sheep												
Soda ash												
Steel	15								15		15	0 44
Sugar	469	34							469	34	503	45 28
Spirits, beer, &c	109	7							109	7	116	10 26
Tobacco (raw)	16								16		16	0 45
Tallow		3								3	3	0 07

Tin	17	2							17	2	19	1 68
Turpentine												
Wheat	28	285							28	285	313	7 36
White lead	20								20		20	1 80
Whiting	7								7		7	0 63
Wool												
All other goods and merchandise uot enumerated	793	533							793	533	1,326	127 89
Bark												
Barrels empty	10	29							10	29	39	3 32
Boat knees												
Floats	1,120	40							1,120	40	1,160	20 30
Firewood, in vessels	5,190	957							5,190	957	6,147	123 65
" rafts												
Hoops												
Hop poles	17								17		17	2 50
Lumber, sawn, in vessels	2,553	3,539	10,758	12,782					13,311	16,321	29,632	2,730 40
" " rafts	96								96		96	3 63
Masts, spars, and telegraph poles, in vessels												
" " " " rafts												
Railway ties, in vessels	28								28		28	1 11
" rafts												
Saw logs												
Staves and headings, barrel												
" " pipe												
" " West India												
Staves, salt barrel												
Shingles	91	54							91	54	145	33 90
Split posts and fence rails, in vessels												
" " rafts												
Timber, square, in vessels												
" " rafts												
Traverses	700								700		700	4 44
Woodenware and wood partly manufactured												
Total freight paying tolls	24,572	11,104	10,758	12,782				14,956	35,330	38,842	74,172	4,239 20
Coal, free, per Order in Council	1,260								1,260		1,260	
Grand total freight	25,832	11,104	10,758	12,782				14,956	36,590	38,842	75,432	

Total tolls on vessels		1,681 36
" passengers		158 19
" free coal	$33 62	
Wharfage and winterage		216 46
Other receipts		143 00
Total revenue, exclusive of hydraulic rents		6,438 21

Department of Railways and Canals,
Ottawa, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

APPENDIX A—*Continued.*

No. (A) 10.—General Statement showing the Quantity of each Article transported on the St. Peter's Canal, and the Amount of Revenue collected during the Season of Navigation in 1900.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												$ cts.
Ashes, pot and pearl	1								1		1	0 01
Apples	69								69		69	0 69
Agricultural products not enumerated, vegetables	185								185		185	1 85
" " animal	16								16		16	0 16
Agricultural implements	24	4							24	4	28	0 28
Barley	9								9		9	0 09
Bricks	1,652								1,652		1,652	16 52
Bones												
Brimstone												
Buckwheat												
Cement and water lime	93	231							93	231	324	3 24
Clay, lime and sand	1	301							1	301	302	3 02
Coal		32,418								32,418	32,418	324 18
Corn	8								8		8	0 08
Cattle	70								70		70	0 70
Cotton (raw)												
Crockery and earthenware	18								18		18	0 18
Dye wood and dye stuffs												
Fish	24	1,432							24	1,432	1,456	14 56
Flax and hemp	9								9		9	0 09
Flour	1,851								1,851		1,851	18 51
Furniture	47								47		47	0 47
Gypsum		315								315	315	3 15
Glass (all kinds)	40								40		40	0 40
Hay (pressed)	1,324								1,324		1,324	13 24
Hogs	2								2		2	0 02
Horses	1								1		1	0 01
Hides and skins, horns and hoofs												
Ice												
Iron, railway	10	40							10	40	50	0 50

" pig		85								85	85	0 85
" all other	188	20							188	20	208	2 08
Iron ore		60								60	60	0 60
Kryolite chemical ore and other ore, except iron	31								31		31	0 31
Lard and lard oil	4								4		4	0 04
Meal, all kinds	693								693		693	6 93
Meats, other than pork	83								83		83	0 83
Marble		3,033								3,033	3,033	30 33
Manilla	16								16		16	0 16
Molasses	211								211		211	2 11
Nails	583								583		583	5 83
Oats	2,257								2,257		2,257	22 57
Oil (in barrels)	227	13							227	13	240	2 40
" cake												
Pease	3								3		3	0 03
Potatoes	3,194								3,194		3,194	31 94
Pork	95								95		95	0 95
Paint	18								18		18	0 18
Pitch and tar	11								11		11	0 11
Rags		10								10	10	0 10
Rye												
Flax seed												
Rosin	3								3		3	0 03
Salt	276	10							276	10	286	2 86
Stone intended for cutting	446								446		446	4 46
" wrought												
" not suitable for cutting, unwrought	80	2,744							80	2,744	2,824	28 24
Seeds, all kinds	5								5		5	0 05
Sheep	4								4		4	0 04
Soda ash	1								1		1	0 01
Steel												
Sugar	117								117		117	1 17
Spirits, beer, &c	122								122		122	1 22
Tobacco (raw)	7								7		7	0 07
Tallow		1								1	1	0 01
Tin	47	2							47	2	49	0 49
Turpentine	1								1		1	0 01
Wheat												
White lead	1								1		1	0 01
Whiting												
Wool												
All other goods and merchandise not enumerated	1,367								1,367		1,367	13 67
Bark	35								35		35	0 35
Barrels, empty	6	19							6	19	25	0 25
Boat knees												
Floats												
Fire wood, in vessels	116	369							116	369	485	4 85
" rafts												
Hoops	2								2		2	0 02
Hop poles												

No. (A) 10 – **General Statement** showing the Quantity of each Article transported on the St Peter's Canal, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up,	Down.		
												$ cts.
Lumber, sawn, in vessels	15,261								15,261		15,261	152 61
" rafts												
Masts, spars and telegraph poles, in vessels	27								27		27	0 27
" " rafts												
Railway ties in vessels	270								270		270	2 70
" rafts												
Saw logs												
Staves and headings, barrel												
" " pipe												
" " West India												
Staves, salt barrel												
Shingles	866								866		866	8 66
Split posts and fence rails, in vessels	47								47		47	0 47
" " " rafts												
Timber, square, in vessels	530	1							530	1	531	5 31
" rafts												
Traverses												
Woodenware and wood partly manufactured												
Total freight paying tolls	32,705	41,108							32,705	41,108	73,818	738 13
Total tolls on vessels												2,317 52
Other receipts												
Total receipts												3,055 65

Department of Railways and Canals,
Ottawa, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

APPENDIX A—*Continued.*

No. (A) 11.—General Statement showing the Quantity of each Article transported on the Trent Valley Canals, and the Amount of Revenue collected during the Season of Navigation in 1900,

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States. to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												$ cts.
Ashes, pot and pearl												
Apples												
Agricultural products not enumerated, vegetables												
" " " animal												
Agricultural implements												
Barley												
Bricks	23	90							23	90	113	1 36
Bones												
Brimstone												
Buckwheat												
Cement and water lime												
Clay, lime and sand												
Coal												
Corn												
Cattle	34								34		34	34
Cotton (raw)												
Crockery and earthenware												
Dye wood and dye stuffs												
Fish												
Flax and Hemp												
Flour												
Furniture												
Gypsum												
Glass (all kinds)												
Hay (pressed)												
Hogs	172								172		172	1 72
Horses	1								1		1	0 01
Hides and skins, horns and hoofs												
Ice												
Iron, railway												

No. (A) 11.—General Statement showing the Quantity of each Article transported on the Trent Valley Canal—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												$ cts.
Iron pig												
" all other												
" ore												
Kryolite chemical ore and other ore, except iron												
Lard and lard oil												
Meal, all kinds												
Meats, other than pork												
Marble												
Manilla												
Molasses												
Nails												
Oats												
Oil, (in barrels)		20								20	20	0 60
" cake												
Pease												
Potatoes												
Pork												
Paint												
Pitch and tar												
Rags												
Rye												
Flax seed												
Rosin												
Salt												
Stone intended for cutting												
" wrought												
" not suitable for cutting, unwrought		210								210	210	0 98
Seeds, all kinds												
Sheep	2								2		2	0 02
Soda ash												
Steel												
Sugar												
Spirits, beer, &c												
Tobacco (raw)												

Tallow												
Tin												
Turpentine												
Wheat	560	67							560	67	627	6 27
White lead												
Whiting												
Wool												
All other goods and merchandise, not enumerated	18	83							18	83	101	3 03
Bark	43	10							43	10	53	2 27
Barrels Empty												
Boat knees												
Floats	175	5,920							175	5,920	6,095	44 20
Fire wood, in vessels	4,868	2,103							14,868	2,103	16,971	179 34
" " rafts		205								205	205	8 18
Hoops												
Hop poles												
Lumber, sawn, in vessels	1,396	458							1,396	458	1,854	44 89
" " rafts	38	56							38	56	94	1 88
Masts, spars and telegraph poles, in vessels	53								53		53	1 06
" " " " rafts		140								140	140	2 00
Railway ties, in vessels												
" rafts	933	19							933	19	952	37 75
Saw logs	12,923	1,542							12,923	1,542	14,465	128 33
Staves and headings, barrel	158								158		158	1 50
" " pipe												
" " West India												
Staves, salt barrel	75								75		75	0 75
Shingles	78	27							78	27	105	7 02
Split posts and fence rails, in vessels												
" " rafts												
Timber, square, in vessels	61								61		61	1 11
" " rafts	275	736							275	736	1,011	10 65
Traverses												
Woodenware and wood partly manufactured												
Total freight paying tolls	31,886	11,686							31,886	11,686	43,572	480 26

Total tolls on vessels	65521
" " passengers	128 23
Other receipts	50 20
Total revenue, exclusive of hydraulic rents	1,223 81

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics

APPENDIX A—*Continued.*

No. (A) 12.—**General Statement** showing the Quantity of each Article transported on the Murray Canal, and the Amount of Revenue collected during the Season of Navigation in 1900.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Toll.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												$ cts.
Ashes, pot and pearl	39	3							39	3	42	1 06
Apples	155	38							155	38	193	3 66
Agricultural products not enumerated, vegetables	27	14							27	14	41	0 81
" " " animal												
Agricultural implements												
Barley	5	327							5	327	332	6 24
Bricks	1	40							1	40	41	0 77
Bones		2								2	2	0 04
Brimstone												
Buckwheat		128								128	128	2 41
Cement and water lime	121	10							121	10	131	2 50
Clay, lime and sand	44								44		44	0 83
Coal	165	160						393	165	553	718	13 48
Corn												
Cattle												
Cotton (raw)												
Crockery and earthenware	8	17							8	17	25	0 64
Dye wood and dye stuffs												
Fish	13		2						15		15	0 30
Flax and hemp												
Flour	2	8							2	8	10	0 19
Furniture	121	45	3					1	124	46	170	4 43
Gypsum												
Glass (all kinds)	140	46							140	46	186	4 71
Hay (pressed)				70						70	70	1 32
Hogs												
Horses	28	4	1						29	4	33	0 63
Hides and skins, horns and hoofs	15								15		15	0 20
Ice												

Iron, railway	74								74		74	1 39
" pig												
" all other	246	535							246	535	781	14 75
" ore								1		1	1	0 05
Kryolite chemical ore and other ore, except iron												
Lard and lard oil	8	2							8	2	10	0 19
Meal, all kinds		28								28	28	0 54
Meats, other than pork		8								8	8	0 16
Marble	5								5		5	0 13
Manilla												
Molasses		4								4	4	0 10
Nails	2								2		2	0 06
Oats												
Oil (in barrels)	36	136							36	136	172	4 30
" cake												
Pease		500								500	500	9 41
Potatoes												
Pork												
Paint	52	23							52	23	75	1 92
Pitch and tar	29	38							29	38	67	1 69
Rags	16								16		16	0 41
Rye		664								664	664	12 50
Flax seed												
Rosin												
Salt	18								18		18	0 34
Stone intended for cutting												
" wrought												
" not suitable for cutting, unwrought	2,117								2,117		2,117	21 17
Seeds, all kinds	27	9							27	9	36	0 70
Sheep												
Soda ash	88								88		88	2 21
Steel	41								41		41	0 78
Sugar	128	11							128	11	139	3 51
Spirits, beer, &c	56	50							56	50	106	2 68
Tobacco (raw)												
Tallow												
Tin	71	2							71	2	73	1 83
Turpentine												
Wheat		1,240								1,240	1,240	23 30
White lead	2								2		2	0 06
Whiting	219								219		219	5 50
Wool	2	1							2	1	3	0 06
All other goods and merchandise not enumerated	2,552	3,320	5						2,557	3,320	5,877	147 08
Bark												
Barrels, empty	9								9		9	0 18
Boat knees												
Floats												
Fire wood, in vessels	3,024		804						3,828		3,828	31 93
" rafts												
Hoops												

No. (A) 12 — **General Statement** showing the Quantity of each Article transported on the Murray Canal, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												$ cts.
Hop poles												
Lumber, sawn, in vessels	60		312						372		372	4 18
" rafts												
Masts, spars and telegraph poles, in vessels			171						171		171	1 08
" " " rafts												
Railway ties, in vessels			125						125		125	1 25
" rafts												
Saw logs												
Staves and headings, barrel												
" " pipe												
" " West India												
Staves, salt barrel												
Shingles												
Split posts and fence rails, in vessels												
" " rafts												
Timber, square, in vessels												
" " rafts												
Traverses												
Woodenware and wood partly manufactured												
Total freight paying tolls	9,766	7,413	1,423	70				395	11,189	7,878	19,067	339 75
Total tolls on vessels												263 34
" passengers												226 71
Total revenue exclusive of hydraulic rents												829 80

RICHARD DELVIN,
Compiler of Canal Statistics.

Department of Railways and Canals,
Ottawa, September 9, 1901.

APPENDIX A—*Continued.*

No. (A) 13.—General Statement showing the Quantity of each Article transported on Sault Ste. Marie Canal, during the Season of Navigation, 1900.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total. Tons.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
Ashes, pot and pearl	38						1		38		39
Apples	8		19						198		198
Agricultural products not enumerated, vegetables	1		1						2		2
" " " " animal											
Agricultural implements											
Barley						2,520				2,520	2,520
Bricks	502						40		542		542
Bones											
Brimstone											
Buckwheat											
Cement and water lime	425	652						20	425	672	1,097
Clay, lime and sand	2	5,560		300					2	5,860	5,862
Coal	977	20			454,651	6,950	67,700		523,328	6,970	530,298
Corn								9,975		9,975	9,975
Cattle	28	2	11						39	2	41
Cotton (raw)											
Crockery and earthenware											
Dye wood and dye stuffs											
Fish		349		161				191		701	701
Flax and hemp											
Flour	30	15,366	75		515	33,903		22,140	620	71,409	72,029
Furniture	20		37					9	57	9	66
Gypsum											
Glass (all kinds)	77							1	77	1	78
Hay (pressed)	1,733	10	56				31		1,820	10	1,830
Hogs	4		1						5		5
Horses	35	52	40	10				36	75	98	173
Hides and skins, horns and hoofs		17						64		81	81
Ice											

No. (A) 13.—GENERAL STATEMENT showing the Quantity of each Article transported on the Sault Ste. Marie Canal, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
	Up.	Down.	Up.	Down.	Up.	Down.	Uy.	Down.	Up.	Down.	
Iron, railway	1,152	243			1,050		16,314	1,667	18,516	1,910	20,426
" pig						1,400				1,400	1,400
" all other	1,333	119	29		90		154	15	1,606	134	1,740
Iron, ore						998,075		1,516		999,591	999,591
Kryolite chemical ore and other ore, except iron						5,435				5,435	5,435
Lard and lard oil	6								6		6
Meal, all kinds						790		696		1,486	1,486
Meats, other than pork	1								1		1
Marble			5						5		5
Manilla											
Molasses											
Nails	285		66						351		351
Oats	1,519				17	850	17		1,553	850	2,403
Oil (in barrels)	379		241		129		116		865		865
Oil cake	1								1		1
Pease											
Potatoes	27		12	3					39	3	42
Pork	19								19		19
Paint	75								75		75
Pitch and tar	20								20		20
Rags								3		3	3
Rye						1,148				1,148	1,148
Flax seed						10,496		1,250		11,746	11,746
Rosin											
Salt	790		326		684				1,800		1,800
Stone intended for cutting				450			450		450	450	900
" wrought											
" not suitable for cutting, unwrought	1,352				1,224				2,576		2,576
Seeds, all kinds	2								2		2
Sheep			1						1		1
Soda ash											
Steel	8						1		9		9
Sugar	450		51						501		501
Spirits, beer, &c	430		41				16		487		487

Tobacco (raw)											
Tallow								1		1	1
Tin	20								20		20
Turpentine											
Wheat		151,884		15,314		50,757		60,806		278,761	278,761
White lead	15								15		15
Whiting	10								10		10
Wool											
All other goods and merchandise not enumerated	12,246	2,496	11,990	33	9,934	3,852	2 5	519	34,385	6,900	41,285
Bark			20						20		20
Barrels empty											
Boat knees											
Floats											
Fire-wood, in vessels	239	3,704		5,450				1 2	239	9,256	9,495
" " rafts	1,350								1,350		1,350
Hoops											
Hop poles											
Lumber, sawn, in vessels	3,461	982		812		2,297	1,224	3,632	4,685	7,723	12,408
" rafts											
Masts, spars, and telegraph poles, in vessels											
" " " rafts		34								34	34
Railway ties, in vessels	277	658					43		320	658	978
" rafts											
Saw logs	452	1,711	5,024	44	53	706	27	686	5,556	3,147	8,703
Staves and headings, barrel											
" " pipe											
" " West India											
Staves, salt barrel											
Shingles	13	3				590		134	13	727	740
Split posts and fence rails, in vessels											
" " rafts											
Timber, square, in vessels	655						945	1,540	1,600	1,540	3,140
" " rafts	80	60							80	60	140
Traverses											
Woodenware and wood partly manufactured	1								1		1
Total freight	30,548	183,922	18,217	22,577	468,347	1,119,769	87,294	105,003	604,406	1,431,271	2,035,677

Other receipts .... $ 56 51

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

APPENDIX

No. (A) 14.—STATEMENT of Traffic on the undermentioned Canals, and

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Class No. 1.		$ cts.		$ cts.		$ cts.
Canadian vessels, steam	421,565	4,189 40	708,008	4,770 60	64,997	210 90
United States vessels, steam	365,098	5,436 21	32,619	219 58	732	10 49
Canadian vessels, sail	153,816	3,237 90	1,325,198	13,569 35	22,583	248 27
United States vessels, sail	72,333	1,534 50	72,532	827 47	212,443	2,658 97
Total, Class No. 1	1,012,812	14,398 01	2,138,357	19,387 00	300,755	3,128 63
Class No. 2.	No.		No.		No.	
Passengers	63,104	680 99	71,901	3,638 78	2,192	32 41
Class No. 3.	Tons.		Tons.		Tons.	
Bricks	326	41 22	13,161	868 51	827	80 91
Brimstone	...	...	753	74 61	...	...
Cement and water lime	39	6 75	6,907	828 21	822	82 20
Clay, lime and sand	3,008	221 62	34,761	1,520 23	4,781	511 31
Fish	342	51 30	59	7 87	...	...
Gypsum	...	...	1,414	17 69	...	...
Iron, railway	...	...	503	29 49	...	...
" pig	1,792	358 40	1,793	166 95	861	86 10
" all other	6,398	1,253 13	7,250	767 75	1,705	165 02
Steel	8,203	1,623 65	436	56 57	157	15 70
Salt	533	98 43	3,114	361 87	505	37 75
Stone, for cutting	21	3 15	1,065	40 66	...	...
Apples	451	12 91	4,639	675 91	437	25 02
Barley	4,035	432 80	19,808	1,330 58	48	1 61
Buckwheat	...	...	1,159	62 14	...	...
Corn	163,509	16,350 90	174,854	4,572 99	...	...
Cotton, raw	...	...	...	...	...	...
Flax and hemp	470	70 50	941	23 53	...	...
Flour	10,968	1,877 55	11,682	807 52	524	17 78
Hay, pressed	1	0 18	1,992	145 64	19,207	1,495 82
Meals, all kinds	14,244	2,848 80	600	37 61	...	...
Oil cake	2,705	541 00	...	...	...	...
Oats	41,055	4,152 78	44,058	1,615 47	3,867	129 07
Pease	119	11 90	11,106	1,045 28	77	2 60
Potatoes	1	0 17	87	4 03	62	2 17
Rye	3,538	353 80	9,466	645 95	...	...
Hax seed	...	...	3,779	94 96	...	...
Seeds, all kinds	11	1 65	3,186	161 39	30	1 17
Tabacco, raw	...	...	155	12 15	...	...
Wheat	137,800	13,809 21	153,658	5,016 36	...	...
All other agricultural products, vegetables	7	1 35	1,644	238 22	...	...
Bones	...	...	357	47 82	...	...
Cattle	...	...	286	21 77	91	3 24
Hogs	...	...	42	3 27	...	...
Hides and skins, horns and hoofs	51	7 65	44	3 73	...	...
Horses	60	2 94	557	33 99	53	1 94
Lard and lard oil	1,597	318 95	2,103	137 09	11	1 10
Meats (other than pork)	...	...	11	1 40	...	...
Pork	137	26 40	694	51 03	...	...
Sheep	...	...	105	8 10	123	4 24
Tallow	1,271	222 20	379	19 55	...	...
Wool	...	...	4	0 38	...	...
All other agricultural products, animal	...	...	3,070	314 87	...	...
Total, Class No. 3	402,692	44,701 29	521,682	21,873 14	34,188	2,664 75

A—*Continued.*

the Amount of Tolls collected during the Season of Navigation in 1900.

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Sault Ste. Marie Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	$ cts.		$ cts.		$ cts.		$ cts.		$ cts.	
200,511	211 04	137,016	642 50	141,065	885 62	43,696	873 93	60,308	402 72	498,082
10,469	42 28	444	11 23	854	14 89	287	5 74	40,662	162 40	1,335,786
1,660	5 52	113,032	1,500 34	37,391	548 68	71,620	1,434 25	...	...	7 ,228
536	4 50	19,624	448 56	12,205	232 17	180	3 60	...	...	281,702
213,179	263 34	270,116	2,602 63	191,515	1,681 36	115,783	2,317 52	100,970	565 12	2,194,748
No.		No.		No.		No.		No.		No.
18,678	226 71	11,964	171 10	7,447	158 19	...	...	19,470	128 23	22,280
Tons.		Tons.		Tons.		Tons.		Tons.		Tons.
41	0 77	...	...	1,681	39 52	1,652	16 52	113	1 36	542
...	...	...	...	...	...	...	...	...	...	...
131	2 50	133	7 29	1,185	28 98	324	3 24	...	...	1,097
44	0 83	1,900	47 01	7,579	177 01	302	3 02	...	...	5,862
15	0 30	3	0 18	11	0 28	1,456	14 56	...	...	701
...	...	...	...	109	2 59	315	3 15	...	...	...
74	1 39	430	12 98	5	0 24	50	0 50	...	...	20,426
...	...	100	2 00	22	0 53	85	0 85	...	...	1,400
781	14 75	86	2 42	494	12 41	208	2 08	...	...	1,740
41	0 78	...	...	15	0 44	...	...	...	...	9
18	0 34	...	...	1,261	32 52	286	2 86	...	...	1,800
...	...	...	...	...	...	446	4 46	...	...	900
193	3 66	36	2 40	159	3 86	69	0 69	...	...	198
332	6 24	2	0 12	...	...	9	0 09	...	...	2,520
128	2 41	117	11 44	63	2 70	...	...	...	...	...
...	...	...	...	147	3 51	8	0 08	...	...	9,975
...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	9	0 09	...	...	...
10	0 19	11	1 09	470	11 83	1,851	18 51	...	...	72,029
70	1 32	1,170	108 99	404	9 76	1,324	13 24	...	...	1,830
28	0 54	1	0 06	123	3 02	693	6 93	...	...	1,486
...	...	5	0 49	...	...	...	...	...	...	1
...	...	1,752	133 75	670	25 23	2,257	22 57	...	...	2,403
500	9 41	91	6 63	...	...	3	0 03	...	...	...
...	...	114	7 22	5	0 18	3,194	31 94	...	...	42
664	12 50	3	0 30	28	0 66	...	...	...	...	1,148
...	...	...	...	...	...	...	...	...	...	11,746
36	0 70	4	0 40	34	0 85	5	0 05	...	...	2
...	...	...	...	16	0 45	7	0 07	...	...	...
1,240	23 30	...	...	213	7 36	...	...	627	6 27	278,761
41	0 81	17	1 42	13	0 33	185	1 85	...	...	2
2	0 04	12	0 72	11	0 48	...	...	...	...	...
...	...	448	35 20	2	0 06	70	0 70	34	0 34	41
...	...	119	9 40	...	...	2	0 02	172	1 72	5
15	0 29	7	0 46	5	0 15	...	...	...	...	81
33	0 63	155	7 07	9	0 27	1	0 01	1	0 01	
10	0 19	4	0 08	41	1 06	4	0 04	...	...	
8	0 16	...	...	6	0 15	83	0 83	...	...	1
...	...	20	1 20	109	2 71	95	0 95	...	...	19
...	...	269	23 55	...	...	4	0 04	2	0 02	1
...	...	17	1 64	3	0 07	1	0 01	...	...	1
3	0 06	...	...	...	...	...	...	...	...	...
...	...	2,210	195 01	1,082	29 20	16	0 16	...	...	...
4,458	84 11	9,186	620 52	16,075	398 41	15,014	150 14	949	9 72	416,948

No. (A) 14.—STATEMENT of Traffic on the undermentioned Canals, and

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Class No. 4.		$ cts.		$ cts.		$ cts.
Ashes, pot and pearl	40	8 00	114	22 80		
Agricultural implements			67	8 39		
Crockery and earthenware	11	1 65	85	14 74	23	2 30
Dye woods and dye stuffs			18	1 40	25	2 50
Furniture	33	5 02	1,584	277 78		
Glass (all kind)	30	5 00	1,014	188 04	17	1 61
Marble	863	129 45				
Manilla	174	26 10	33	6 54		
Molasses	290	47 40	486	58 35	86	2 93
Nails	11	0 60	901	135 59		
Oil (in barrels)	20,125	4,016 09	2,576	251 46	112	8 19
Paint	64	11 50	394	62 15	66	6 51
Pitch and tar	35	5 27	478	60 80	1,770	177 00
Rags	70	1 32	597	85 30		
Rosin	14	0 27	1,710	87 03	1,954	195 40
Soda ash	85	12 32	550	103 15	181	13 14
Sugar	13,393	2,012 06	4,725	797 55	935	93 04
Stone (wrought)			269	50 97	54	0 88
Tin			1,244	246 10		
Turpentine			276	13 95	273	27 30
White lead	17	3 35	79	12 88		
Whiting			794	150 54		
Whisky and all other spirits	48	7 25	716	130 99		
Merchandise (not enumerated)	52,902	7,619 64	17,236	2,484 22	5,691	450 71
Total, Class No. 4	88,205	13,912 29	35,946	5,250 72	11,187	981 51
Class No. 5.						
Bark						
Barrels (empty)	677	122 82	728	58 44	43	4 32
Floats			49	0 86		
Fire wood (in vessels)	7,893	421 36	8,733	165 55	162,264	5,429 68
" (in rafts)						
Lumber sawn (in vessels)	77,464	13,882 71	42,804	1,755 49	39,635	2,315 61
" (in rafts)	4	0 30	979	42 80		
Hoops			2	0 25		
Railway ties (in vessels)	1,563	124 88	170	5 88	3,261	260 41
" (in rafts)						
Masts, spars and telegraph poles (in vessels)	9	1 80	5	0 13		
Masts, spars and telegraph poles (in rafts)	6	0 65	20,487	512 30		
Square timber (in vessels)	20,319	3,042 76	648	9 07		
" (in rafts)			5,094	127 55		
Woodenware and wood partly manufactured	71	28 40	60	17 80		
Shingles	97	67 49	25	4 50		
Split posts and fence rails (in vessels)			3	0 30		
Saw logs	7,082	278 56	575	13 11		
Staves and headings (barrel)	780	37 41				
" " (salt barrel)						
Traverses			100	1 25		
Hop poles			84	0 50		
Total, Class No. 5	115,965	18,009 14	80,546	2,715 78	205,203	8,010 02

the Amount of Tolls collected, &c.—*Continued.*

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Sault Ste. Marie Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	$ cts.		$ cts.		$ cts.		$ cts.		$ cts.	
42	1 06	8	1 52	15	2 56	1	0 01	....	....	39
....	....	2	0 38	139	15 29	28	0 28	....	....	....
25	0 64	....	....	15	1 34	18	0 18	....	....	....
....	....	....	....	....	....	....	....	....	....	....
170	4 43	12	1 91	48	4 40	47	0 47	....	....	66
186	4 71	10	1 90	54	4 84	40	0 40	....	....	78
5	0 13	....	....	....	....	3,033	30 33	....	....	5
....	....	1	0 19	7	0 63	16	0 16	....	....	....
4	0 10	3	0 57	121	10 59	211	2 11	....	....	....
2	0 06	....	....	110	10 94	583	5 83	....	....	351
172	4 30	2	0 38	198	17 65	240	2 40	20	0 60	865
75	1 92	4	0 76	38	3 60	18	0 18	....	....	75
67	1 69	33	6 27	56	5 37	11	0 11	....	....	20
16	0 41	41	7 52	34	4 00	10	0 10	....	....	3
....	....	....	....	....	....	3	0 03	....	....	....
88	2 21	....	....	....	....	1	0 01	....	....	....
139	3 51	....	....	503	45 28	117	1 17	....	....	501
....	....	....	....	....	....	....	....	....	....	....
73	1 83	1	0 19	19	1 68	49	0 49	....	....	20
....	....	....	....	....	....	1	0 01	....	....	....
2	0 06	1	0 19	20	1 80	1	0 01	....	....	15
219	5 50	....	....	7	0 63	....	....	....	....	10
106	2 68	....	....	116	10 26	122	1 22	....	....	487
5,877	147 08	984	126 83	1,326	127 89	1,367	13 67	101	3 03	41,285
7,268	182 32	1,102	148 61	2,826	268 75	5,917	59 17	121	3 63	43,820
....	....	....	....	....	....	35	0 35	53	2 27	20
9	0 18	56	6 43	39	3 32	25	0 25	....	....	....
....	....	31,805	267 48	1,160	20 30	....	....	6,095	44 20	....
3,828	31 93	11,292	316 58	6,147	123 65	485	4 85	16,971	179 34	9,495
....	....	440	10 31	....	....	....	....	205	8 18	1,350
372	4 18	301,852	21,101 55	29,632	2,730 40	15,261	152 61	1,854	44 89	12,408
....	....	230	1 80	96	3 63	....	....	94	1 88	....
....	....	3	0 26	....	....	2	0 02	....	....	....
125	1 25	1,192	213 81	28	1 11	270	2 70	....	....	978
....	....	....	....	....	....	....	....	952	37 75	....
171	1 08	....	....	....	....	27	0 27	53	1 06	....
....	....	....	....	....	....	....	....	140	2 00	34
....	....	1,214	15 32	....	....	531	5 31	61	1 11	3,140
....	....	4,500	47 22	....	....	....	....	1,011	10 65	140
....	....	....	....	....	....	....	....	....	....	1
....	....	30	17 78	145	33 90	866	8 66	105	7 02	740
....	....	....	....	....	....	47	0 47	....	....	....
....	....	3,859	83 88	....	....	....	....	14,465	123 33	8,703
....	....	....	....	....	....	....	....	158	1 50	....
....	....	....	....	....	....	....	....	75	0 75	....
....	....	....	....	700	4 44	....	....	....	....	....
....	....	....	....	17	2 50	....	....	....	....	....
4,505	38 62	356,503	22,082 42	37,964	2,923 25	17,549	175 49	42,292	465 93	37,009

No. (A) 14.—STATEMENT of Traffic on the undermentioned Canals, and

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Special Class.		$ cts.		$ cts.		$ cts.
Coal	47,392	9,478 40	307,397	43,941 82	92,598	9,072 90
Kryolite or chemical ore	....	....	307	34 54	....	....
Iron ore	58,400	2,920 00	.. . .	.. ..	... ...	... ...
Stone (unwrought, not suitable for cutting)	271	16 84	2,442	64 80	5,385	316 13
Total, Special Class	106,063	12,415 24	310,146	44,041 16	97,983	9,389 03
Total freight and tolls	712,925	104,116 96	948,320	96,906 58	348,561	21,045 31
Timber and other wood, free	....	....	15,942	1,456 71	....	... .
Wheat, corn, flour, iron, salt, coal, &c., free	6,435	935 87	344,804	33,302 10	....	....
Grand totals (passengers and tonnage of vessels not included)	719,360	105,052 83	1,309,066	131,665 39	348,561	24,206 35

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

the Amount of Tolls collected, &c.—*Concluded.*

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley. Canals.		Sault Ste. Marie Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	$ cts.		$ cts.		$ cts.		$ cts.		$ cts.	
718	13 48	....	....	17,292	648 04	32,418	324 18	....	....	530,298
....	....	....	....	15	0 75	31	0 31	....	....	5,435
1	0 05	....	....	....	....	60	0 60	....	....	999,591
2,117	21 17	....	....	....	....	2,824	28 24	210	0 98	2,576
2,836	34 70	....	....	17,307	648 79	35,333	353 33	210	0 98	1,537,900
19,067	829 80	366,791	25,625 28	74,172	6,078 75	73,813	3,055 65	43,572	1,173 61	2,035,677
....	....	22,354	23,543	....	....	....	....	....	....	....
....	....	....	....	1,260	....	....	....	....	....	....
19,067	829 80	389,145	25,860 71	75,432	6,078 75	73,813	3,055 65	43,572	1,173 61	2,035,67

RICHARD DEVLIN,
Compiler of Canal Statistics.

SUPPLEMENTARY APPENDIX

No. (A) 15.—SUMMARY STATEMENT of Traffic on the undermentioned Canals during of each description of property passed through

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
		$ cts.		$ cts.		$ cts.
Vessels of all kinds	1,012,812	14,398 01	1,368,618	19,387 00	300,755	3,128 63
Passengers	No. 63,104	680 99	No. 71,901	3,638 78	No. 2,192	32 41
Forest—Produce of Wood.	Tons.		Tons.		Tons.	
Bark	....	....	....	....	....	....
Floats	....	....	49	0 86	....	....
" Free.	....	....	....	....	....	....
Firewood	7,893	421 36	8,733	165 55	162,264	5,429 68
" Free.	....	....	....	....	....	....
Hoops and hop poles	....	....	86	0 75	....	....
Lumber, sawed	77,468	13,883 01	43,783	1,798 29	39,635	2,315 61
" Free.	....	....	15,760	....	....	....
Masts, spars, &c.	15	2 45	20,492	512 43	....	....
Railway ties	1,563	124 88	170	5 88	3,261	260 41
Saw logs	7,082	278 56	575	13 11	....	....
" Free.	....	....	....	....	....	....
Staves, all kinds	780	37 41	....	....	....	....
Shingles	97	67 49	25	4 50	....	....
Split posts and rails	....	....	3	0 30	....	....
Timber, square	20,319	3,042 76	5,742	136 62	....	....
" Free.	....	....	....	....	....	....
Traverses	....	....	100	1 25	....	....
Total	115,217	17,857 92	95,518	2,639 54	205,160	8,005 70
Farm Stock.						
Cattle	....	....	286	21 77	91	3 24
Hogs	....	....	42	3 27	....	....
Horses	60	2 94	557	33 99	53	1 94
Sheep	....	....	105	8 10	123	4 24
Total	60	2 94	990	67 13	267	9 42
Produce of Animals.						
Bones	....	....	357	47 82	....	....
Horns and hoofs, hides and skins, raw	51	7 65	44	3 73	....	....
Lard and lard oil	1,597	318 95	2,103	137 09	11	1 10
Meats other than pork	....	....	11	1 40	....	....
Pork	137	26 40	694	51 03	....	....
" Free.	1	....	....	....	....	....
Tallow	1,271	222 20	379	19 55	....	....
Wool	....	....	4	0 38	....	....
Agricultural products not enumerated, animal	....	....	3,070	314 87	....	....
Total	3,057	575 20	6,662	575 87	11	1 10

A—*Continued.*

the Season of Navigation ended December 31, 1900, showing the Total Quantity and the amount of Tolls collected thereon.

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Sault Ste. Marie Canal. Free.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	$ cts.		$ cts.		$ cts.		$ cts.		$ cts.	
213,179	263 34	270,116	2,602 63	191,515	1,681 36	115,783	2,317 52	100,970	565 12	2,194,748
No. 18,678	226 71	No. 11,964	171 10	No. 7,447	158 19	No.	....	No. 19,470	128 23	No. 22,280
Tons.		Tons.		Tons.		Tons.		Tons.		Tons.
....	....	....	....	....	....	35	0 35	53	2 27	20
....	....	31,805	267 48	1,160	20 30	....	....	6,095	44 20	....
....	....	12,764	....	....	....	....	....	....	....	....
3,828	31 93	17,732	326 89	6,147	123 65	485	4 85	17,176	187 52	10,845
....	....	660	....	....	....	....	....	....	....	....
....	....	3	0 26	17	2 50	2	0 02	....	....	....
372	4 18	302,082	21,103 35	29,728	2,734 03	15,261	152 61	1,948	46 77	12,408
....	....	50	....	....	....	....	....	....	....	....
171	1 08	....	....	....	....	27	0 27	193	3 06	34
125	1 25	1,192	213 81	28	1 11	270	2 70	952	37 75	978
....	....	3,859	83 88	....	....	....	....	14,465	123 33	8,703
....	....	2,080	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	233	2 25	....
....	....	30	17 78	145	33 90	866	8 66	105	7 02	740
....	....	....	....	....	....	47	0 47	....	....	....
....	....	5,744	62 54	....	....	531	5 31	1,072	11 76	3,280
....	....	6,800	....	....	....	....	....	....	....	....
....	....	....	....	700	4 44	....	....	....	....	....
4,496	38 44	378,801	22,075 99	37,925	2,919 93	17,524	175 24	42,292	465 93	37,008
....	....	448	35 20	2	0 06	70	0 70	34	0 34	41
....	....	119	9 40	....	....	2	0 02	172	1 72	5
33	0 63	155	7 07	9	0 27	1	0 01	1	0 01	173
....	....	269	23 55	....	....	4	0 04	2	0 02	1
33	0 63	991	75 22	11	0 33	77	0 77	209	2 09	220
2	0 04	12	0 72	11	0 48	....	....	....	....	....
15	0 29	7	0 46	5	0 15	....	....	....	....	81
10	0 19	4	0 08	41	1 06	4	0 04	....	....	6
8	0 16	....	....	6	0 15	83	0 83	....	....	1
....	....	20	1 20	109	2 71	95	0 95	....	....	19
....	....	....	....	....	....	....	....	....	....	....
....	....	17	1 64	3	0 07	1	0 01	....	....	1
3	0 06	....	....	....	....	....	....	....	....	....
....	....	2,210	195 01	1,082	29 20	16	0 16	....	....	....
38	0 74	2,270	199 11	1,257	33 82	199	1 99	....	....	108

No. (A) 15.—SUMMARY STATEMENT of Traffic on the undermentioned

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
		$ cts.		$ cts.		$ cts.
Agricultural Products.						
Agricultural products not enumerated, vegetable	7	1 35	1,644	238 22	....	....
Apples	451	12 91	4,639	675 91	437	25 02
Barley	4,035	432 80	19,808	1,330 58	48	1 61
" Free.	....	....	1,288	....	....	....
Buckwheat	....	....	1,159	62 14	....	....
Corn	163,509	16,350 90	174,854	4,572 99	....	....
" Free.	....	....	113,315	....	....	....
Flax and hemp	470	70 50	941	23 53	....	....
Flour	10,968	1,877 55	11,682	807 52	524	17 78
" Free.	....	....	1,595	....	....	....
Hay, pressed	1	0 18	1,992	145 64	19,207	1,495 82
Meals, all kinds	14,244	2,848 80	600	37 61	....	....
Manilla	174	26 10	33	6 54	....	....
Oats	41,055	4,152 78	44,058	1,615 47	3,867	129 07
" Free.	....	....	8,925	....	....	....
Pease	119	11 90	11,106	1,045 28	77	2 60
" Free.	....	....	115	....	....	....
Potatoes	1	0 17	87	4 03	62	2 17
Rye	3,538	353 80	9,466	645 95	....	....
" Free.	....	....	3,078	....	....	....
Seeds, flax, clover and grass	11	1 65	6,965	256 35	30	1 17
" " Free.	218	....	....	....	....	....
Tobacco, raw	....	....	155	12 15	....	....
Wheat	137,800	13,809 21	153,658	5,016 36	....	....
" Free.	....	....	122,571	....	....	....
Total	376,601	39,950 60	693,734	16,496 27	24,252	1,675 24
Manufactures.						
Ashes, pot and pearl	40	8 00	114	22 80	....	....
" " Free.	....	....	25	....	....	....
Agricultural implements	....	....	67	8 39	....	....
Barrels, empty	677	122 82	728	58 44	43	4 32
" Free.	....	....	182	....	....	....
Bricks	326	41 22	13,161	868 51	827	80 91
" Free.	49	....	....	....	....	....
Cement and water lime	39	6 75	6,907	828 21	822	82 20
" " Free.	1,931	....	....	....	....	....
Crockery and earthenware	11	1 65	85	14 74	23	2 30
" " Free.	5	....	....	....	....	....
Furniture	33	5 02	1,584	277 78	....	....
" Free.	1	....	1	....	....	....
Glass of all kinds	30	5 00	1,014	188 04	17	1 61
" " Free.	456	....	6	....	....	....
Iron, railway	....	....	503	29 49	....	....
" " Free.	74	....	....	....	....	....
" pig	1,792	358 40	1,793	166 95	861	86 10
" " Free.	3	....	508	....	....	....
" all other	6,398	1,253 13	7,250	767 75	1,705	165 02
" " Free.	1,469	....	4,292	....	....	....
Molasses	290	47 40	486	58 35	86	2 93
Nails	11	0 60	901	135 59	....	....
" Free.	193	....	....	....	....	....
Oil	20,125	4,016 09	2,576	251 46	112	8 19
" Free.	74	....	15,647	....	....	....
Oil cake	2,705	541 00	....	....	....	....
Paint	64	11 50	394	62 15	66	6 51
" Free.	12	....	....	....	....	....

Canals, and the Amount of Tolls collected, &c.—*Continued.*

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Sault Ste. Marie Canal. Free.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	$ cts.		$ cts.		$ cts.		$ cts.		$ cts.	
41	0 81	17	1 42	13	0 33	185	1 85	....	....	2
193	3 66	36	2 40	159	3 86	69	0 69	....	....	198
332	6 24	2	0 12	....	....	9	0 09	....	....	2,520
....	....	....	....	....	....	....	....	....	....	....
128	2 41	117	11 44	63	2 70	....	....	....	....	....
....	....	....	....	147	3 51	8	0 08	....	....	9,975
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	9	0 09	....	....	....
10	0 19	11	1 09	470	11 83	1,851	18 51	....	....	72,029
....	....	....	....	....	....	....	....	....	....	....
70	1 32	1,170	108 99	404	9 76	1,324	13 24	....	....	1,830
28	0 54	1	0 06	123	3 02	693	6 93	....	....	1,486
....	....	1	0 19	7	0 63	16	0 16	....	....	....
....	....	1,752	133 75	670	25 23	2,257	22 57	....	....	2,403
....	....	....	....	....	....	....	....	....	....	....
500	9 41	91	6 63	....	....	3	0 03	....	....	....
....	....	....	....	....	....	....	....	....	....	....
....	....	114	7 22	5	0 18	3,194	31 94	....	....	42
664	12 50	3	0 30	28	0 66	....	....	....	....	1,148
....	....	....	....	....	....	....	....	....	....	....
36	0 70	4	0 40	34	0 85	5	0 05	....	....	11,748
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	16	0 45	7	0 07	....	....	....
1,240	23 30	....	....	313	7 36	....	....	627	6 27	....
....	....	....	....	....	....	....	....	....	....	278,761
3,242	61 08	3,319	274 01	2,452	70 37	9,630	96 30	627	6 27	382,142
42	1 06	8	1 52	15	2 56	1	0 01	....	....	39
....	....	....	....	....	....	....	....	....	....	....
....	....	2	0 38	139	15 29	28	0 28	....	....	....
9	0 18	56	6 43	39	3 32	25	0 25	....	....	....
....	....	....	....	....	....	....	....	....	....	....
41	0 77	....	....	1,681	39 52	1,652	16 52	113	1 36	542
....	....	....	....	....	....	....	....	....	....	....
131	2 50	133	7 29	1,185	28 98	324	3 24	....	....	1,097
....	....	....	....	....	....	....	....	....	....	....
25	0 64	....	....	15	1 34	18	0 18	....	....	....
....	....	....	....	....	....	....	....	....	....	....
170	4 43	12	1 91	48	4 40	47	0 47	....	....	66
....	....	....	....	....	....	....	....	....	....	....
186	4 71	10	1 90	54	4 84	40	0 40	....	....	78
....	....	....	....	....	....	....	....	....	....	....
74	1 39	430	12 98	5	0 24	50	0 50	....	....	20,426
....	....	....	....	....	....	....	....	....	....	....
....	....	100	2 00	22	0 53	85	0 85	....	....	1,400
....	....	....	....	....	....	....	....	....	....	....
781	14 75	36	2 42	494	12 41	208	2 08	....	....	1,740
....	....	....	....	....	....	....	....	....	....	....
4	0 10	3	0 57	121	10 59	211	2 11	....	....	....
2	0 06	....	....	110	10 94	583	5 83	....	....	351
....	....	....	....	....	....	....	....	....	....	....
172	4 30	2	0 38	198	17 65	240	2 40	20	0 60	865
....	....	....	....	....	....	....	....	....	....	....
....	....	5	0 49	....	....	....	....	....	....	1
75	1 92	4	0 76	38	3 60	18	0 18	....	....	75
....	....	....	....	....	....	....	....	....	....	....

No. (A) 15.—SUMMARY STATEMENT of Traffic on the undermentioned

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Manufactures—Concluded.		$ cts.		$ cts.		$ cts.
Pitch and tar	35	5 27	478	60 80	1,770	177 00
" Free.	21					
Rosin	14	0 27	1,710	87 03	1,954	195 40
Soda ash	85	12 32	550	103 15	181	13 14
" Free.	69					
Spirits, whisky, &c	48	7 25	716	130 99		
" " Free.	295		11			
Steel	8,203	1,623 65	436	56 57	157	15 70
" Free.			5,420			
Sugar	13,393	2,012 06	4,725	797 55	935	93 04
" Free.	472					
Tin			1,244	246 10		
" Free.	117					
White lead	17	3 35	79	12 88		
" Free.	4		16			
Turpentine			276	13 95	273	27 30
Whiting			794	150 54		
" Free.	39					
Woodenware	71	28 40	60	17 80		
Total	59,691	10,111 15	74,739	5,416 01	9,832	961 67
Merchandise.						
Brimstone, crude			753	74 61		
Clay, lime and sand	3,008	221 62	34,761	1,520 23	4,781	511 31
" " Free.	116		15			
Coal	47,392	9,478 40	307,397	43,941 82	92,598	9,072 90
" Free.			67,842			
Dye woods and dye stuffs			18	1 40	25	2 50
Fish	342	51 30	59	7 87		
" Free.	8					
Gypsum			1,414	17 69		
Ores, all kinds	58,400	2,920 00	307	34 54		
" Free.			42			
Marble	863	129 45				
Rags	70	1 32	597	85 30		
Salt	533	98 43	3,114	361 87	505	37 75
" Free.	48					
Stone, all kinds	292	19 99	3,776	156 43	5,439	317 01
All other goods and merchandise, not enumerated	52,902	7,619 64	17,236	2,484 22	5,691	450 71
" " " Free.	760		92			
Total	164,734	20,540 15	437,423	48,685 98	109,039	10,392 18
Grand totals, passengers and tonnage of vessels not included	719,360	104,116 96	1,309,066	96,906 58	348,561	24,206 35

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

Canals, and the Amount of Tolls collected, &c.—*Concluded.*

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Sault Ste. Marie Canal. Free.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	$ cts.		$ cts.		$ cts.		$ cts.		$ cts.	
67	1 69	33	6 27	56	5 37	11	0 11	......	......	20
......	......	......	......	......	......	......	......	......	......	......
......	......	......	......	......	......	3	0 03	......	......	......
88	2 21	......	......	......	......	1	0 01	......	......	......
......	......	......	......	......	......	......	......	......	......	......
106	2 68	......	......	116	10 26	122	1 22	......	......	487
......	......	......	......	......	......	......	......	......	......	......
41	0 78	......	......	15	0 44	......	......	......	......	9
......	......	......	......	......	......	......	......	......	......	......
139	3 51	......	......	503	45 28	117	1 17	......	......	501
......	......	......	......	......	......	......	......	......	......	......
73	1 83	1	0 19	19	1 68	49	0 49	......	......	20
......	......	......	......	......	......	......	......	......	......	......
2	0 06	1	0 19	20	1 80	1	0 01	......	......	15
......	......	......	......	......	......	......	......	......	......	......
......	......	......	......	......	......	1	0 01	......	......	......
219	5 50	......	......	7	0 63	......	......	......	......	10
......	......	......	......	......	......	......	......	......	......	......
......	......	......	......	......	......	......	......	......	......	1
2,447	55 07	836	45 68	4,900	221 67	3,835	38 35	133	1 96	27,743
......	......	......	......	......	......	......	......	......	......	......
44	0 83	1,900	47 01	7,579	177 01	302	3 02	......	......	5,862
......	......	......	......	......	......	......	......	......	......	......
718	13 48	......	......	17,292	648 04	32,418	324 18	......	......	530,298
......	......	......	......	1,260	......	......	......	......	......	......
......	......	......	......	......	......	......	......	......	......	......
15	0 30	3	0 18	11	0 28	1,456	14 56	......	......	701
......	......	......	......	......	......	......	......	......	......	......
......	......	......	......	109	2 59	315	3 15	......	......	......
1	0 05	......	......	15	0 75	91	0 91	......	......	1,005,026
......	......	......	......	......	......	......	......	......	......	......
5	0 13	......	......	......	......	3,033	30 33	......	......	5
16	0 41	41	7 52	34	4 00	10	0 10	......	......	3
18	0 34	......	......	1,261	32 52	286	2 86	......	......	1,800
......	......	......	......	......	......	......	......	......	......	......
2,117	21 17	......	......	......	......	3,270	32 70	210	0 98	3,476
5,877	147 08	984	126 83	1,326	127 89	1,367	13 67	101	3 03	41,285
......	......	......	......	......	......	......	......	......	......	......
8,811	183 79	2,928	181 54	28,887	993 08	42,548	425 48	311	4 01	1,588,456
19,067	829 80	389,145	25,625 28	75,432	6,078 75	73,813	3,055 65	43,572	1,173 61	2,035,667

RICHARD DEVLIN,
Compiler of Canal Statistics.

APPENDIX A—*Continued.*

No. (A) 16.—Statement showing the amount of Tolls accrued each month during the Season of Navigation ended December 31, 1900.

Canals and Offices.	January	April.	May.	June.	July.	August.	September	October.	November	December.	Total.
Welland Canal.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Chippawa	....	....	5 25	4 85	2 50	1 00	8 51	25 64	2 25	....	50 00
Colborne	....	2,539 92	12,327 03	10,881 15	10,294 88	12,022 16	11,567 64	8,464 26	7,828 71	1,514 02	77,439 77
Dalhousie	....	2,317 53	4,854 99	3,811 30	3,187 61	3,708 31	2,816 06	2,123 93	2,167 62	701 59	25,688 94
Dunnville	....	0 36	51 61	57 50	50 95	79 12	63 20	142 29	46 75	26 77	518 55
St. Catharines	....	22 73	26 75	55 37	28 27	40 82	58 02	83 86	98 63	5 25	419 70
Total Welland Canal	......	4,880 54	17,265 63	14,810 17	13,564 21	15,851 41	14,513 43	10,839 98	10,143 96	2,247 63	104,116 96
St. Lawrence Canals.											
Beauharnois	....	....	224 88	55 14	42 20	74 47	47 13	46 30	22 08	....	512 20
Cardinal	....	30 00	47 98	55 87	52 76	45 92	35 29	52 80	65 01	12 46	398 09
Cornwall	....	97 61	3,943 45	5,185 86	5,665 70	5,875 85	4,995 56	3,246 86	3,936 03	78 29	33,025 21
Kingston	....	873 92	3,747 94	2,534 80	3,553 30	3,339 34	2,913 87	3,841 16	3,593 14	....	24,397 47
Lachine	....	....	376 51	481 60	497 21	562 35	385 75	291 58	204 35	....	2,799 35
Montreal	....	....	4,241 92	3,808 47	4,141 29	4,354 13	3,365 86	2,795 06	2,440 15	93 31	25,240 19
Soulanges	.....	....	1,070 47	1,180 27	1,869 67	2,019 36	1,613 57	1,748 45	1,032 03	0 25	10,534 07
Total St. Lawrence Canals	......	1,001 53	13,653 15	13,302 01	15,822 13	16,271 42	13,357 03	12,022 21	11,292 79	184 31	96,906 58
Chambly Canal.											
Chambly	....	....	867 24	1,741 20	1,848 50	1,991 65	1,601 50	1,875 91	1,049 32	....	10,975 32
St. Johns	....	....	3,033 69	1,618 36	2,168 00	2,287 82	1,662 38	1,059 78	831 46	11 87	12,673 36
St. Ours	....	8 91	45 08	65 36	100 62	65 42	60 96	137 50	73 32	0 50	557 67
Total Chambly Canal	....	8 91	3,946 01	3,424 92	4,117 12	4,344 89	3,324 84	3,078 19	1,954 10	12 37	24,206 35

Ottawa Canals.											
Ottawa	....	....	2,623 69	2,414 94	3,070 26	3,522 25	2,511 36	2,953 08	1,812 07	....	18,907 65
Carillon	......	... ..	3 15	3 64	3 25	2 93	1 23	0 96	2 68	....	17 84
Grenville	....	.. ....	829 90	794 03	622 97	721 59	1,207 39	1,061 99	443 27	....	5,681 14
St. Anne's	....	4 37	112 61	198 86	203 59	199 84	117 18	112 23	69 97	....	1,018 65
Total Ottawa Canals	....	4 37	3,569 35	3,411 47	3,900 07	4,446 61	3,837 16	4,128 26	2,327 99	....	25,625 28
Rideau Canal.											
Kingston Mills	....	....	187 22	186 10	252 86	198 19	148 93	57 02	30 29	....	1,060 61
Ottawa	....	....	540 48	1,002 34	917 30	530 66	408 62	447 19	398 78	6 04	4,251 41
Smith's Falls	....	....	53 34	102 86	135 15	173 08	167 70	79 41	55 19	....	766 73
Total Rideau Canal	.... ..	....	781 04	1,291 30	1,305 31	901 93	725 25	583 62	484 26	6 04	6,078 75
St. Peter's Canal.											
St. Peter's	27 55	96 61	303 92	389 55	517 69	511 26	301 68	332 84	337 81	236 74	3,055 65
Trent Valley Canals.											
Bobcaygeon	....	0 50	20 67	61 96	84 99	106 46	92 37	106 86	58 71	....	532 52
Buckhorn	....	... .	1 50	10 30	26 22	37 19	12 16	22 40	15 70	....	125 47
Burleigh	....	....	5 61	11 53	10 57	19 16	12 38	18 00	14 60	1 00	92 85
Fenelon Falls	.....	....	1 00	33 41	25 70	26 11	8 65	4 15	3 85	....	102 87
Hastings	... ...	... .	1 14	6 56	8 38	1 75	6 25	0 50	0 25	....	24 83
Peterborough	... .	2 94	19 74	38 22	57 10	66 13	53 29	35 62	22 03	....	295 07
Total Trent Valley Canals	......	3 44	49 66	161 98	212 96	256 80	185 10	187 53	115 14	1 00	1,173 61
Murray Canal.											
Brighton	....	8 65	68 69	86 82	149 10	197 53	130 77	118 69	69 55	....	829 80
Grand total	27 55	6,004 05	39,637 45	36,878 22	39,588 59	42,781 85	36,375 26	31,286 32	26,725 60	2,688 09	261,992 98

RICHARD DEVLIN,
Compiler of Canal Statistics.

Department of Railways and Canals,
Ottawa, September 9, 1901.

APPENDIX A—*Continued*

No. (A) 17.—**Summary Statement** showing the Number, Tonnage and Nationality of Vessels passed through all the Canals, during the Season of Navigation ended December 31, 1900, and the amount of Tolls collected thereon.

Vessels.	Total Number.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Welland Canal.													$ cts.
Canadian vessels, steam	1,361	137,860	133,425	74,536	1,115	....	....	....	74,629	212,396	209,169	421,565	4,189 40
" sail	404	48,751	43,643	27.983	494	195	....	148	32,602	77,077	76,739	153,816	3,237 90
Total Canadian	1,765	186,611	177,068	102,519	1,609	195	....	148	107,231	289,473	285,908	575,381	7,427 30
United States vessels, steam	444	173	192	15,188	780	165,621	164,758	91	18,295	181,073	184,025	365,098	5,436 21
" sail	190	613	306	12,939	....	24,072	18,043	....	16,360	37,624	34,709	72,333	1,534 50
Total United States	634	786	498	28,127	780	189,693	182,801	91	34,655	218,697	218,734	437,431	6,970 71
Grand Total, Welland Canal	2,399	187,397	177,566	130,646	2,389	189,788	182,801	239	141.886	508,170	504,642	1,012,812	14,398 01
St. Lawrence Canals.													
Canadian vessels, steam	3,505	366,017	292,551	19,309	....	....	....	280	29,851	385,606	322,402	708,008	4,770 60
" sail	5,232	667,811	533,437	45,731	682	341	64	....	77,132	713,883	611,315	1,325,198	13,569 35
Total Canadian	8,737	1,033,828	825,988	65,040	682	341	64	280	106,983	1,099,489	933,717	2,033,206	18,339 95
United States vessels, steam	471	285	1,310	4,433	47	6,475	6,065	1,055	12,949	12,248	20,371	32,619	219 58
" sail	450	2,204	8,393	16,079	587	216	180	25,109	19,764	43,608	28,924	72,582	827 47
Total United States	921	2,489	9,703	20,512	634	6,691	6,245	26,164	32,713	55,856	49,295	105,151	1,047 05
Grand Total, St. Lawrence Canals	9,658	1,036,317	835,691	85,552	1,316	7,032	6,309	26,444	139,696	1,155,345	983,012	2,138,357	19,387 00

CHAMBLY CANAL.													
Canadian vessels, steam	330	32,651	32,120	114					112	32,765	32,232	64,997	210 90
" sail	334	7,353	6,462	3,651					5,117	11,004	11,579	22,583	248 27
Total Canadian	664	40,004	38,582	3,765					5,229	43,769	43,811	87,580	459 17
United States vessels, steam	25	14	29	182					507	196	536	732	10 49
" sail	2,152	284	2,468	93,525	98				116,068	93,809	118,634	212,443	2,658 97
Total United States	2,177	298	2,497	93,707	98				116,575	94,005	119,170	213,175	2,669 46
Grand Total, Chambly Canal	2,841	40,302	41,079	97,472	98				121,804	137,774	162,981	300,755	3,128 63
OTTAWA CANALS.													
Canadian vessels, steam	936	40,430	96,586							40,430	96,586	137,016	642 50
" sail	974	8,032	104,205		795					8,032	105,000	113,032	1,500 34
Total Canadian	1,910	48,462	200,791		795					48,462	201,586	250,048	2,142 84
United States vessels, steam	6	18	129		297					18	426	444	11 23
" sail	198	3,641	693		14,978			312		3,953	15,671	19,624	448 56
Total United States	204	3,659	822		15,275			312		3,971	16,097	20,068	459 79
Grand Total, Ottawa Canals	2,114	52,121	201,613		16,070			312		52,433	217,683	270,116	2,602 63
RIDEAU CANAL.													
Canadian vessels, steam	1,590	66,974	67,071	3,068					3,952	70,042	71,023	141,065	885 62
" sail	761	13,485	13,603	5,157	98				5,048	18,642	18,749	37,391	548 68
Total Canadian	2,351	80,459	80,674	8,225	98				9,000	88,684	89,772	178,456	1,434 30
United States vessels, steam	57	199	117	205					333	404	450	854	14 89
" sail	171	4,737	2,210	171	4,905				182	4,908	7,297	12,205	232 17
Total United States	228	4,936	2,327	376	4,905				515	5,312	7,747	13,059	247 06
Grand Total, Rideau Canal	2,579	85,395	83,001	8,601	5,003				9,515	93,996	97,519	191,515	1,681 36
ST. PETER'S CANAL.													
Canadian vessels, steam	278	24,937	18,759							24,937	18,759	43,696	873 93
" sail	1,343	35,271	36,178					171		35,442	36,178	71,620	1,434 25
Total Canadian	1,621	60,028	54,937					171		60,379	54,937	115,316	2,308 18

No. (A) 17.—SUMMARY STATEMENT showing the Number, Tonnage and Nationality of Vessels, &c.—*Continued.*

Vessels.	Total Number.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
ST. PETER'S CANAL—*Concluded.*													$ cts.
United States vessels, steam	4	61	43					183		244	43	287	5 74
" sail	3	25	77					78		103	77	180	3 60
Total United States	7	86	120					261		347	120	467	9 34
Grand Total, St. Peter's Canal	1,628	60,294	55,057					432		60,726	55,057	115,783	2,317 52
TRENT VALLEY CANALS.													
Canadian vessels, steam	1,541	29,763	30,545							29,763	30,545	60,308	402 72
" sail	671	20,233	20,429							20,233	20,429	40,662	162 40
Total Canadian	2,212	49,996	50,974							49,996	50,974	100,970	565 12
United States vessels, steam													
" sail													
Total United States													
Grand Total, Trent Valley Canals	2,212	49,996	50,974							49,996	50,974	100,970	565 12
MURRAY CANAL.													
Canadian vessels, steam	520	100,238	63,535	17,747	60				18,934	117,985	82,529	200,514	211 04
" sail	185	4,254	4,839	1,026					350	5,280	5,189	10,469	42 28
Total Canadian	705	104,492	68,374	18,773	60				19,284	123,265	87,718	210,983	253 32
United States vessels, steam	23	119	465	510	190	158		147	71	934	726	1,660	5 52
" sail	17	19	5	345					167	364	172	536	4 50
Total United States	40	138	470	855	190	158		147	238	1,298	898	2,196	10 02
Grand Total, Murray Canal	745	104,630	68,844	19,628	250	158		147	19,522	124,563	88,616	213,179	263 34

SAULT STE. MARIE CANAL.													
Canadian vessels, steam	1,554	137,705	154,439	58,954	10,915	1,465	....	32,995	101,609	231,119	266,963	498,082	....
" sail	236	25,528	29,513	8,650	763	908	....	4,421	9,445	39,507	39,721	79,228	....
Total Canadian	1,790	163,233	183,952	67,604	11,678	2,373	....	37,416	111,064	270,626	306,684	577,310	....
United States vessels, steam	1,066	206	1,337	11,448	5,001	839,940	455,369	16,520	5,915	868,114	467,622	1,335,736	....
" sail	225	718	50	2,664	3,560	172,243	99,861	2,246	360	177,871	103,831	281,702	....
Total United States	1,291	924	1,387	14,112	8,561	1,012,183	555,230	18,766	6,275	1,045,985	571,453	1,617,438	....
Grand Total, Sault Ste. Marie Canal.	3,081	164,157	185,339	81,716	20,239	1,014,556	555,230	56,187	117,329	1,316,611	878,137	2,194,748	....

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

No. (A) 17.—Summary Statement showing the Number, Tonnage and Nationality of Vessels, &c.—*Concluded.*

RECAPITULATION.

Canadian Vessels.	Total Number.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.	
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			
Steam and Sail.													$	cts.
Welland	1,765	186,611	177,068	102,519	1,609	195	...	148	107,231	289,473	285,908	575,381	7,427	30
St. Lawrence	8,737	1,033,828	825,988	65,040	682	341	64	280	106,983	1,099,489	933,717	2,033,206	18,339	95
Chambly	664	40,004	38,582	3,765	...	...	...	...	5,229	43,769	43,811	87,580	459	17
Ottawa	1,910	48,462	200,791	...	795	...	...	...	...	48,462	201,586	250,048	2,142	84
Rideau	2,351	80,459	80,674	8,225	98	...	...	...	9,000	88,684	89,772	178,456	1,434	30
St. Peter's	1,621	60,208	54,937	...	...	...	...	171	...	60,379	54,937	115,316	2,308	18
Trent Valley	2,212	49,996	50,974	...	...	...	...	...	...	49,996	50,974	100,970	565	12
Murray	705	104,492	68,374	18,773	60	...	...	...	19,284	123,265	87,718	210,983	253	32
Sault Ste. Marie	1,790	163,233	183,952	67,604	11,678	2,373	...	37,416	111,054	270,626	306,684	577,310	...	
Total Canadian	21,755	1,767,293	1,681,340	265,926	14,922	2,909	64	38,015	358,781	2,074,143	2,055,107	4,129,250	32,930	18
United States Vessels.														
Welland	634	786	498	28,127	780	189,693	182,801	91	34,655	218,697	218,734	437,431	6,970	71
St. Lawrence	921	2,489	9,703	20,512	634	6,691	6,245	26,164	32,713	55,856	49,296	105,151	1,047	05
Chambly	2,177	298	2,497	93,707	98	...	...	...	116,575	94,005	119,170	213,175	2,669	46
Ottawa	204	3,659	822	...	15,275	...	...	312	...	3,971	16,097	20,068	459	79
Rideau	228	4,936	2,327	376	4,905	...	...	...	515	5,312	7,747	13,059	247	06
St. Peter's	7	86	120	...	...	...	...	261	...	347	120	467	9	34
Trent Valley	...	...	...	...	...	...	...	...	...	...	...	...	...	
Murray	40	138	470	855	190	158	...	147	238	1,298	898	2,196	10	02
Sault Ste. Marie	1,291	924	1,387	14,112	8,561	1,012,183	555,230	18,766	6,275	1,045,985	571,453	1,617,438	...	...
Total United States	5,502	13,316	17,824	157,689	30,443	1,208,725	744,276	45,741	190,971	1,425,471	983,514	2,408,985	11,413	43
Grand total Canadian and United States	27,257	1,780,609	1,699,164	423,615	45,365	1,211,634	744,340	83,756	549,752	3,499,614	3,038,621	6,538,235	44,343	61

Department of Railways and Canals,
Ottawa, September, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

APPENDIX A—*Continued.*

No. (A) 18.—COMPARATIVE STATEMENT of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation 1899 and 1900, and the Amount of Tolls collected on the same, including on Vessels and Passengers.

Canals.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												$ cts.
1899.												
Welland	6,557	148,272	10,907	4,902	135,038	225,378		258,716	152,502	637,268	789,770	118,033 93
St. Lawrence	169,002	917,528	7,125	472	344	1,233	34,957	218,432	211,428	1,137,665	1,349,093	86,348 81
Chambly	2,221	12,210	227,428					120,776	229,649	132,986	362,635	26,000 10
Ottawa	445	449,840		69,820					445	519,660	520,105	35,365 40
Rideau	25,311	9,609	11,337	19,727				12,921	36,648	33,257	69,905	5,704 22
St. Peter's	23,818	46,986							23,818	46,986	70,804	3,151 33
Trent Valley	31,177	8,983							31,177	8,983	40,160	1,240 74
Murray	10,089	5,815	501					383	10,590	6,198	16,788	714 49
Sault. Ste. Marie	27,588	234,169	9,066	29,212	596,648	1,903,264	90,721	115,996	724,023	2,282,641	3,006,664	No Tolls.
Grand Total	296,208	1,833,412	266,364	115,133	732,030	2,129,875	125,678	727,224	1,420,280	4,805,644	6,225,924	276,559 02
1900.												
Welland	8,633	146,034	10,037	4,344	99,560	218,969		231,783	118,230	601,130	719,360	104,116 96
St. Lawrence	168,182	875,505	7,587	705	290	1,177	17,836	237,787	193,895	1,115,171	1,309,066	96,906 58
Chambly	4,350	8,468	222,011	68			25	113,639	226,386	122,175	348,561	24,206 35
Ottawa	299	347,678		41,168					299	388,846	389,145	25,625 28
Rideau	25,832	11,104	10,758	12,782				14,956	36,590	38,842	75,432	6,078 75
St. Peter's	32,705	41,108							32,705	41,108	73,813	3,055 65
Trent Valley	31,886	11,686							31,886	11,686	43,572	1,173 61
Murray	9,776	7,413	1,423	70				395	11,189	7,878	19,067	829 80
Sault Ste. Marie	30,548	183,922	18,217	22,577	468,347	1,119,769	87,294	105,003	604,406	1,431,271	2,035,677	No Tolls.
Grand Total	312,201	1,632,915	270,033	81,714	568,197	1,339,915	105,155	703,563	1,255,586	3,758,107	5,013,693	261,992 98

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

APPENDIX A—*Continued.*

No. (A) 19.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals during the Season of Navigation in 1900.

WELLAND CANAL.

	CANADIAN.				UNITED STATES.			
	Steam Vessels.		Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
8	15	120	5	40	14	112	5	40
10	3	30	7	70	....	....	....	....
15	3	45	....	....	3	45	....	....
20	4	80	10	200	4	80	3	60
25	4	100	3	75	....	....	....	....
30	6	180	5	150	1	30	....	....
35	5	175	....	....	3	105	....	....
40	1	40	3	120	1	40	....	....
45	1	45	3	135	1	45	....	....
50	....	....	7	350	2	100	....	....
55	....	....	1	55	1	55	....	....
60	1	60	2	120	1	60	5	300
65	....	....	1	65	....	....	1	65
70	2	140	1	70	....	....	....	....
75	....	....	5	375	....	....	....	....
85	2	170	....	....	....	....	....	....
90	....	....	2	180	....	....	....	....
100	....	....	1	100	....	....	1	100
110	....	....	1	110	....	....	....	....
120	....	....	1	120	1	120	....	....
125	....	....	....	....	....	....	1	125
140	....	....	1	140	2	280	....	....
150	1	150	1	150	....	....	....	....
160	1	160	1	160	....	....	....	....
165	1	165	....	....	....	....	....	....
175	....	....	....	....	1	175	....	....
180	....	....	1	180	....	....	....	....
190	1	190	1	190	1	190	....	....
200	....	....	2	400	1	200	....	....
220	3	660	1	220	....	....	....	....
230	1	230	....	....	....	....	1	230
260	1	260	....	....	1	260	....	....
270	....	....	2	540	....	....	1	270
275	....	....	1	275	1	275	....	....
280	....	....	....	....	1	280	....	....
285	....	....	1	285	....	....	....	....
290	1	290	....	....	....	....	....	....
295	....	....	....	....	....	....	2	590
300	....	....	....	....	1	300	1	300
305	....	....	....	....	....	....	1	305
310	1	310	....	....	....	....	....	....
315	....	....	....	....	....	....	2	630
320	....	....	3	960	....	....	....	....
325	....	....	1	325	....	....	....	....
330	....	....	1	330	1	330	....	....
335	....	....	2	670	....	....	1	335
360	2	720	....	....	2	720	....	....
375	....	....	....	....	1	375	....	....
390	....	....	....	....	....	....	1	390
400	1	400	....	....	1	400	1	400
415	1	415	....	....	1	415	....	....
425	....	....	....	....	....	....	1	425
435	....	....	2	870	....	....	1	435
440	1	440	....	....	....	....	....	....
460	1	460	2	920	....	....	....	....
470	....	....	....	....	....	....	3	1,410
480	1	480	1	480	....	....	....	....

APPENDIX A—*Continued.*

No. (A) 19—STATEMENT of the Number and Tonnage of all kinds of Vessels, &c.—*Continued.*

WELLAND CANAL—*Continued.*

CANADIAN.					UNITED STATES.			
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
485	1	485	1	485			3	485
490					1	490		
495	1	495					1	495
500	1	500					1	500
525							1	525
530	1	530						
540	1	540			1	540		
545	1	445	1	545			1	55
555	1	555					1	555
570	1	570	1	570				
575	1	575						
580							2	1,160
590			1	590	1	590	1	590
600	1	600			1		1	600
615					1	615	2	1,230
645			2	1,290				
660					1	660		
680			1	680	1	680		
710					1	710	1	710
719			1	719				
722	1	722						
740	1	740	1	740			1	740
760					1	760		
771	1	771						
787					1	787	1	787
796					1	796		
802			1	802			1	802
837	1	837						
908			1	908				
911					1	911		
918					2	1,836		
928	1	928						
940					1	940		
950	1	950			1	950		
977	1	977						
989	1	989						
994	1	994					1	994
997							1	997
1,029					1	1,029		
1,035	1	1,035			1	1,035		
1,040			1	1,040				
1,054					1	1,054		
1,075					1	1,075		
1,083							1	1,083
1,118					2	2,236		
1,168							1	1,168
1,172	1	1,172						
1,185					1	1,185		
1,203					1	1,203		
1,334	1	1,334			2	2,668		
1,399					1	1,399		
1,425					1	1,425		
1,441	1	1,441			2	2,882		
1,547					1	1,547		
1,548					1	1,548		
1,550					1	1,550		
1,553					2	3,106		
Total....	88	24,800	94	17,799	81	41,199	51	19,831

APPENDIX A—*Continued.*

No. (A) 20.—STATEMENT of the Number and Tonnage of all kinds of Vessels passing through the Canals during the Season of Navigation in 1900.

ST. LAWRENCE CANALS.

	CANADIAN.				UNITED STATES.			
	Steam Vessels.		Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
8	42	336	20	160	7	56	2	16
10	8	80	9	90	1	10	....	....
15	14	210	4	60	6	90	1	15
20	11	220	13	260	1	20	....	....
25	9	225	1	25	1	25	1	25
30	12	360	7	210	....	....	....	....
35	11	385	1	35	2	70	1	35
40	5	200	13	520	2	80	3	120
45	4	180	3	135	1	45	....	....
50	7	350	9	450	2	100	1	50
55	6	330	3	165	....	....	....	....
60	4	240	21	1,260	....	....	....	....
65	....	....	2	130	1	65	....	....
70	5	350	6	420	....	....	....	....
75	....	....	6	450	....	....	....	....
80	2	160	8	640	....	....	2	160
85	2	170	9	765	....	....	3	255
90	3	270	6	540	....	....	12	1,080
95	5	475	6	570	....	....	43	4,085
100	5	500	12	1,200	....	....	59	5,900
105	4	420	11	1,155	....	....	10	1,050
110	2	220	9	990	1	110	13	1,430
115	1	115	7	805	1	115	9	1,035
120	2	240	7	840	....	....	3	360
125	1	125	2	250	....	....	....	....
130	4	520	3	390	....	....	....	....
135	2	270	6	810	....	....	1	135
140	1	140	12	1,680	....	....	....	....
145	2	290	7	1,015	1	145	1	145
150	....	....	24	3,600	....	....	....	....
155	1	155	30	4,650	....	....	....	....
160	1	160	13	2,080	....	....	2	320
165	....	....	10	1,650	....	....	....	....
170	....	....	6	1,020	....	....	....	....
175	....	....	3	525	1	175	....	....
180	....	....	6	1,080	....	....	....	....
185	2	370	5	925	....	....	....	....
190	....	....	1	190	....	....	....	....
195	1	195	3	585	....	....	....	....
200	....	....	1	200	....	....	....	....
205	1	205	....	....	....	....	....	....
220	....	....	3	660	....	....	....	....
230	2	460	4	920	....	....	....	....
255	....	....	3	765	....	....	....	....
260	1	260	3	780	....	....	....	....
265	1	265	3	795	....	....	....	....
275	....	....	1	275	....	....	1	275
285	1	285	3	855	....	....	2	570
290	....	....	3	870	....	....	1	290
300	1	300	6	1,800	....	....	....	....
305	2	610	2	610	....	....	....	....
310	....	....	2	620	....	....	....	....
315	....	....	3	945	....	....	1	315
320	....	....	7	2,240	1	320	....	....
325	1	325	1	325	....	....	1	325
330	....	....	1	330	....	....	....	....

APPENDIX A.—*Continued.*

No. (A) 20—STATEMENT of the Number and Tonnage of all kinds of Vessels, &c.—*Concluded.*

ST. LAWRENCE CANALS—*Continued.*

	CANADIAN.				UNITED STATES.			
	Steam Vessels.		Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
335			1	335				
340	2	680	6	2,040				
345			1	345				
350			2	700				
360	1	360	2	720				
365	1	365	4	1,460				
370			4	1,480				
375	1	375	2	750				
390			2	780				
395			1	395				
411	1	411	3	1,233			1	411
415			3	1,245	1	415		
433			3	1,299			1	433
436			2	872				
442			1	442			1	442
450	1	450						
454	1	454	2	908				
471	1	471						
473							1	473
475			3	1,425				
487			2	974				
500	3	1,500	1	500				
508	1	508						
518			2	1,036				
520	1	520	2	1,040				
539			1	539				
541	2	1,082	2	1,082				
556	1	556						
575	2	1,150	2	1,150				
586	1	586	3	1,758				
590			1	590				
593	1	593						
599	1	599	2	1,198				
628							1	628
681			2	1,362				
715			2	1,430				
771	1	771			1	771	3	2,313
803			1	803			1	803
823					1	823		
870	1	870						
922	1	922			2	1,844		
952	2	1,904						
989	1	989					1	989
1,075					1	1,075		
1,167							1	1,167
1,251							1	1,251
1,328					3	3,984		
1,465	1	1,465			1	1,465		
Total....	218	28,552	435	75,206	39	11,803	185	26,901

APPENDIX A—*Continued.*

No. (A) 21.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals during the Season of Navigation in 1900.

RIDEAU, OTTAWA AND CHAMBLY CANALS.

	Canadian.				United States.			
	Steam Vessels.		Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
8	72	576	272	2,176	17	136	4	32
10	18	180	18	180	5	50	....	....
15	9	135	5	75	6	90	1	15
20	12	240	10	200	3	60	3	60
25	6	150	4	100	4	100	....	....
30	....	....	1	30	1	30	....	....
35	5	175	2	70	1	35	....	....
40	2	80	5	200	2	80	1	40
45	3	135	3	135	....	....	....	....
50	4	200	5	250	....	....	....	....
55	2	110	5	275	....	....	....	....
60	1	60	2	120	....	....	....	....
65	....	....	2	130	....	....	....	....
70	1	70	1	70	....	....	....	....
75	....	....	5	375	....	....	....	....
80	2	160	2	160	....	....	5	400
85	1	85	1	85	....	....	9	765
90	....	....	4	360	....	....	38	3,420
95	1	95	1	95	....	....	150	14,250
100	2	200	12	1,200	....	....	216	21,600
105	1	105	3	315	....	....	48	5,040
110	....	....	5	550	....	....	46	5,060
115	1	115	2	230	....	....	16	1,840
120	....	....	3	360	....	....	14	1,680
125	2	250	3	375	....	....	6	750
135	1	135	3	405	....	....	2	270
140	....	....	5	700	....	....	....	....
145	2	290	8	1,160	....	....	1	145
150	1	150	20	3,000	....	....	....	....
155	1	155	24	3,720	....	....	....	....
160	....	....	10	1,600	....	....	....	....
165	....	....	7	1,155	....	....	....	....
170	....	....	6	1,020	....	....	....	....
175	....	....	1	175	....	....	....	....
180	....	....	1	180	....	....	....	....
185	....	....	1	185	....	....	....	....
190	....	....	1	190	....	....	....	....
195	2	390	1	195	....	....	....	....
228	1	228	1	228	....	....	....	....
262	1	262	....	....	....	....	....	....
324	1	324	....	....	....	....	....	....
332	1	332	....	....	....	....	....	....
397	1	397	....	....	....	....	....	....
Total.....	157	5,784	465	22,029	39	581	560	55,367

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, Sept. 9, 1901.

APPENDIX A.—*Concluded.*

No. (A) 22.—STATEMENT showing the Classified Tonnage of all kinds of Vessels passed through the Canals, during the Season of Navigation in 1900.

WELLAND CANAL.

Canadian.								United States.							
Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.	Class.	Steam Vessels.	No	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	250 to 1,441 tons..	33	22,060	1	250 to 1,040 tons..	28	14,024	1	250 to 1,553 tons..	44	39,562	1	250 to 1,168 tons..	34	18,911
2	200 " 249 " ..	4	890	2	200 " 249 " ..	3	620	2	200 " 249 " ..	1	200	2	200 " 249 " ..	1	230
3	150 " 199 " ..	4	665	3	150 " 199 " ..	4	680	3	150 " 199 " ..	2	365	3	150 " 199 " ..	......	....
4	100 " 149 " ..	......	....	4	100 " 149 " ..	4	470	4	100 " 149 " ..	3	400	4	100 " 149 " ..	2	225
5	50 " 99 " ..	5	370	5	50 " 99 " ..	19	1,215	5	50 " 99 " ..	4	215	5	50 " 99 " ..	6	365
6	Under 50 " ..	42	815	6	Under 50 " ..	36	790	6	Under 50 " ..	27	457	6	Under 50 " ..	8	100
	Total.........	88	24,800		Total.........	94	17,799		Total.........	81	41,199		Total........	51	19,831

ST. LAWRENCE CANALS.

Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.	Class.	Steam Vessels.	No	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	250 to 1,465 tons..	36	19,626	1	250 to 803 tons...	103	41,110	1	250 to 1,465 tons..	11	10,697	1	250 to 1,251 tons..	18	10,685
2	200 " 249 " ..	3	665	2	200 " 249 " ...	8	1,780	2	200 " 249 " ..	......	....	2	200 " 249 " ..	......	....
3	150 " 199 " ..	5	880	3	150 " 199 " ...	101	16,305	3	150 " 199 " ..	1	175	3	150 " 199 " ..	2	320
4	100 " 149 " ..	24	2,840	4	100 " 149 " ...	76	9,135	4	100 " 149 " ..	3	370	4	100 " 149 " ..	96	10,055
5	50 " 99 " ..	34	2,345	5	50 " 99 " ...	76	5,390	5	50 " 99 " ..	3	165	5	50 " 99 " ..	61	5,630
6	Under 50 " ..	116	2,196	6	Under 50 " ...	71	1,495	6	Under 50 " ..	21	396	6	Under 50 " ..	8	211
	Total.........	218	28,552		Total.........	435	75,206		Total.........	39	11,803		Total.........	185	26,901

RIDEAU, OTTAWA AND CHAMBLY CANALS.

Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.	Class.	Steam Vessels.	No	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	250 to 397 tons...	4	1,315	1	250 to — tons...	.....	....	1	250 to — tons...	.....	....	1	250 to — tons...	.....	....
2	200 " 249 " ...	1	228	2	200 " 249 " ...	1	228	2	200 " 249 " ...	.....	....	2	200 " 249 " ...	.....	......
3	150 " 199 " ...	4	695	3	150 " 199 " ...	72	11,420	3	150 " 199 " ...	.....	....	3	150 " 199 " ...	.....	....
4	100 " 149 " ...	9	1,095	4	100 " 149 " ...	44	5,295	4	100 " 149 " ...	.....	....	4	100 " 149 " ...	349	36,385
5	50 " 99 " ...	12	780	5	50 " 99 " ...	28	1,920	5	50 " 99 " ...	.....	....	5	50 " 99 " ...	202	18,835
6	Under 50 " ...	127	1,671	6	Under 50 " ...	320	3,166	6	Under 50 " ...	39	581	6	Under 50 " ...	9	147
	Total.........	157	5,784		Total....	465	22,029		Total.........	39	581		Total.........	560	55,367

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, September 9, 1901.

RICHARD DEVLIN,
Compiler of Canal Statistics.

CANALS

CONSOLIDATED

No. 23.—RATES OF TOLLS ON THE CANALS

WELLAND, ST. LAWRENCE, RIDEAU, OTTAWA, CHAMBLY AND MURRAY CANALS.

(O. C., April 18, 1873.)

The Rates of Tolls are divided into Six Classes, as under, and are per ton, unless otherwise specified.	Welland Canal, westward.	Welland Canal, eastward.	Lake Erie to Montreal.	St. Lawrence Canals, each way.	Chambly Canal and St. Ours Lock.	Rideau Canal, each way.	Ottawa Canals, and St. Ann's Lock, each way.	Ottawa to St. Johns, each way.	Murray Canal, each way.
Class No. 1.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Vessel, steam.......................per ton	0 01½	0 01½	0 02¼	0 00¾	0 00¾	0 01½	0 00⅝	0 01½	0 3/16
" sail and other..........................	0 02¼	0 02¼	0 03¾	0 01½	0 01¼	0 02¼	0 01	0 02⅝	0 1/16
Class No. 2.									
Passengers, 21 years of age and upwards...	0 10	0 10	0 20	0 10	0 05	0 08	0 02¼	0 09¾	0 1¼
" under 21 years each...........	0 05	0 05	0 10	0 05	0 02	0 04	0 01¼	0 04½	0 0⅝
Class No. 3.									
Bricks, cement and water lime...........	15	0 20	0 20	0 15	0 10	0 07	0 06	0 19¾	0 1⅞
Clay, lime and sand..........................									
Brimstone....................................									
Corn..									
Flour..									
Iron, railway..................................									
" pig..									
" all other, including steel (O.C., Feb. 1, 1888)................................									
Plaster, gypsum.............................									
Salt									
Salt meats or fish, in barrels or otherwise...									
Agricultural products, vegetable, not enumerated..................................									
Agricultural products, animal, not enumerated......................................									
Stone, for cutting............................									
Wheat..									
Class No. 4.									
All other articles not enumerated..........	0 15	0 20	0 20	0 20	0 10	0 26	0 14	0 29	0 2½

REVENUE

TARIFF OF TOLLS

OF THE DOMINION OF CANADA, 1900.

TRENT VALLEY CANALS.

(O. C., July 25, 1888.)

1st Section.	2nd Section.	3rd Section.	4th Section.	Through.	Peterborough to Hastings, each way.
Fenelon Falls to Bobcaygeon.	Bobcaygeon to Buckhorn.	Buckhorn to Burleigh.	Burleigh to Lakefield.	Fenelon Falls to Lakefield.	
Tolls Chargeable at Fenelon Falls.	Tolls Chargeable at Bobcaygeon.	Tolls Chargeable at Buckhorn.	Tolls Chargeable at Burleigh.	Tolls Chargeable at Fenelon Falls.	Tolls Chargeable at Peterborough and Hastings.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
0 00$\frac{3}{16}$	0 00$\frac{3}{16}$	0 00$\frac{3}{16}$	0 00$\frac{3}{16}$	0 00¾	0 00$\frac{3}{16}$
0 00¼	0 00¼	0 00¼	0 00¼	0 01	0 00¼
0 01	0 01	0 01	0 01	0 04	0 01
0 00½	0 00½	0 00½	0 00½	0 02	0 00½
.... 0 01	0 01	0 01	0 01	0 04	01
0 03	0 03	0 03	0 03	0 12	03

RATES OF TOLL

WELLAND, ST. LAWRENCE, RIDEAU, OTTAWA, CHAMBLY AND MURRAY CANALS

The Rates of Tolls are divided into Six Classes, as under, and are per ton, unless otherwise specified.	Welland Canal, westward.	Welland Canal, eastward.	Lake Erie to Montreal.	St. Lawrence Canals, each way.	Chambly Canal and St. Ours Lock, each way.	Rideau Canal, each way.	Ottawa Canals and St. Ann's Lock, each way.	Ottawa to St. Johns, each way.	Murray Canal, each way.
Class No. 5.									
Bark	0 20	0 20	0 20	0 15	0 10	0 07	0 06	0 19¼	0 01⅞
Barrels, empty, each	0 02	0 02	0 02	0 02	0 02	0 02	0 01	0 03½	0 00¼
Boat knees, each	0 05	0 05	0 05	0 02	0 02	0 02	0 01	0 03½	0 00¼
Floats, per 1,000 lineal feet	1 40	1 40	1 40	1 40	1 20	1 05	0 50	2 05	0 17½
Firewood, per cord, in vessels	0 20	0 20	0 20	0 20	0 10	0 15	0 08	0 23	0 02⅛
" " rafts	0 25	0 25	0 25	0 25	0 15	0 19	0 09	0 30¼	0 03⅛
Hoops	0 25	0 25	0 25	0 20	0 15	0 15	0 10	0 30	0 02½
Masts and spars, telegraph poles, per ton of 40 cubic feet, in vessels	0 15	0 15	0 15	0 05	0 05	0 08	0 07	0 13¼	0 00⅝
Masts and spars, telegraph poles, per ton of 40 cubic feet, in rafts	0 20	0 20	0 20	0 10	0 10	0 15	0 10	0 22½	0 01¼
Railway ties, in vessels, each	0 01	0 01	0 01	0 00½	0 00½	0 00¾	0 00¾	0 01⅜	0 0¹⁄₁₆
" rafts, each	0 02	0 02	0 02	0 01	0 01	0 02	0 01	0 02¼	0 00⅛
Sawed stuff, boards, plank, scantling and sawed timber, per M feet, board measure, in vessels	0 30	0 30	0 30	0 15	0 10	0 11¼	0 06¾	0 20	0 01⅞
Sawed stuff, boards, plank, scantling and sawed timber, per M feet, board measure, in rafts	0 60	0 60	0 60	0 30	0 20	0 19	0 09	0 36½	0 03¾
Square timber, per M cubic feet, in vessels	3 00	3 00	3 00	1 00	1 00	0 56	0 44	1 69	0 12½
" " rafts	4 50	4 50	4 50	2 00	2 00	1 12	0 63	3 13	0 25
Wagon stuff, woodenware and wood, partly manufactured, per ton of 40 cubic feet	0 40	0 40	0 40	0 40	0 25	0 30	0 20	0 55	0 05
Shingles, per M	0 06	0 06	0 06	0 06	0 04	0 04½	0 02½	0 08	0 00¾
Split posts and fence rails, per M, in vessels	0 40	0 40	0 40	0 40	0 20	0 23	0 12	0 42	0 05
" " " rafts	0 80	0 80	0 80	0 80	0 40	0 38	0 17	0 77	0 10
Saw-logs, each, standard log	0 08	0 08	0 08	0 08	0 05	0 06	0 06	0 13	0 01
Staves and headings, barrel, per M	0 08	0 08	0 08	0 04	0 15	0 15	0 10	0 30	0 02½
" " pipe, per M	1 50	1 50	1 50	1 00	1 00	0 75	0 50	1 75	0 12½
" " West India, per M	0 75	0 75	0 75	0 60	0 25	0 45	0 25	0 65	0 07½
" " salt barrel, sawn or cut, per M	0 08	0 08	0 08	0 04	0 03	0 03	0 02	0 06	0 00½
Traverses, per 100 pieces	0 50	0 50	0 50	0 50	0 40	0 38	0 15	0 67½	0 06¼
Hop poles, per 1,000 pieces	2 00	2 00	2 00	2 00	1 50	1 50	0 65	2 65	0 25
Special Class.									
Gypsum, crude (per O.C., Oct. 28, 1892)	0 15	0 05	0 05	0 05	West	ward	....	.....	. .
Coal	0 20	0 20	0 20	0 15	0 10	0 08	0 05	0 17¾	0 01⅞
Stone, unwrought, corded, and not suitable for cutting, per cord	0 75	0 75	0 75	0 60	0 37½	0 28	0 24	0 77½	0 07½
Kryolite, iron ore or chemical ore	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Ice	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 11	0 05

ON THE CANALS—*Continued.*

TRENT VALLEY CANALS.

1st Section.	2nd Section.	3rd Section.	4th Section.	Through.	Peterborough to Hastings, each way.
Fenelon Falls to Bobcaygeon.	Bobcaygeon to Buckhorn.	Buckhorn to Burleigh.	Burleigh to Lakefield.	Fenelon Falls to Lakefield.	
Tolls Chargeable at Fenelon Falls.	Tolls Chargeable at Babcaygeon.	Tolls Chargeable at Buckhorn.	Tolls Chargeable at Burleigh.	Tolls Chargeable at Fenelon Falls.	Tolls Chargeable at Peterborough and Hastings.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
0 01	0 01	0 01	0 01	0 04	0 01
0 00¼	0 00¼	0 00¼	0 00¼	0 01	0 00¼
0 00¼	0 00¼	0 00¼	0 00¼	0 01	0 00¼
0 13	0 13	0 13	0 13	0 52	0 13
0 03	0 03	0 03	0 03	0 10	0 03
0 04	0 04	0 04	0 04	0 14	0 04
0 02	0 02	0 02	0 02	0 08	0 02
0 02	0 02	0 02	0 02	0 08	0 02
0 01	0 01	0 01	0 01	0 04	0 01
0 00⅛	0 00⅛	0 00⅛	0 00⅛	0 00½	0 00⅛
0 00¼	0 00¼	0 00¼	0 00¼	0 01	0 00¼
0 03	0 03	0 03	0 03	0 10	0 03
0 04	0 04	0 04	0 04	0 14	0 04
0 07	0 07	0 07	0 07	0 28	0 07
0 14	0 14	0 14	0 14	0 56	0 14
0 04	0 04	0 04	0 04	0 16	0 04
0 00¾	0 00¾	0 00¾	0 00¾	0 03	0 00¾
0 03	0 03	0 03	0 03	0 12	0 03
0 05	0 05	0 05	0 05	0 20	0 05
0 00¾	0 00¾	0 00¾	0 00¾	0 03	0 00¾
0 02	0 02	0 02	0 02	0 08	0 02
0 10	0 10	0 10	0 10	0 40	0 10
0 05½	0 05½	0 05½	0 05½	0 22	0 05½
0 00½	0 00½	0 00½	0 00½	0 02	0 00½
0 05	0 05	0 05	0 05	0 20	0 05
0 20	0 20	0 20	0 20	0 80	0 20
Free.	Free.	Free.	Free.	Free.	Free.
0 01	0 01	0 01	0 01	0 04	0 01
0 03½	0 03½	0 03½	0 03½	0 14	0 03½
0 00¾	0 00¾	0 00¾	0 00¾	0 03	0 00¾
Free.	Free.	Free.	Free.	Free.	Free.

St. Peter's Canal.

Sec. **2.** On each and every vessel passing through the said canal, two cents per ton on the vessel and one cent per ton on the freight, each way. O. C. June 23, 1883. Con. O. C. Oct. 26, 1889, sec. 109.

SPECIAL REGULATIONS RELATING TO TOLLS ON SOME OF THE CANALS.

Sec. **3.** Coal may pass up all canals, except the Welland Canal, free of toll. O. C. June 6, 1869 Con O. C. Oct. 26, 1889, sec. 83.

Sec. **4.** Logs, lumber or other produce may pass free of toll down the Chippawa Creek, between the Aqueduct and Port Robinson. O. C. May 18, 1863. Con. O. C. Oct. 26, 1889, sec. 84.

Sec. **5.** (*a.*) In view of the dam constructed across the Ottawa River at Carillon whereby the passage of the rapids at that point through the river is rendered difficult and at times impracticable, it appears necessasy, owing to the continued difficulty attending passage through the slide built in the dam, that the canal should be used by rafts and until otherwise ordered, free passage be given to rafts through the Carillon Canal, subject to such regulations as the Department of Railways and Canals may find necessary in the interest of the trafic of the canal to adopt. O. C. July 6, 1888.

Sec. **5.** (*b.*) "Save in cases for which special permission may be given the Grenville Canal is closed to the passage of rafts, or any portion of a raft of any kind whatever." O. C. June 27, 1890.

Sault Ste. Marie Canal.

Sec. **6.** All vessels and freight shall be permitted to pass through the Sault Ste. Marie Canal free of toll upon such vessels and freight, until otherwise ordered.

Sec. **7.** (*a.*) All up bound goods on which full tolls have been paid for passage through the whole of the St. Lawrence Canals, or for passage through the Lachine Canal, the Ottawa and Rideau Canals or for passage through the Ottawa and Rideau Canals shall be entitled to pass free through the Welland Canal, or any portion thereof, and tolls paid for passage through the Chambly Canal, on goods thereafter so becoming entitled to the above privilege, shall be refunded at Montreal. All down bound goods on which full tolls have been paid for passage through the Welland Canal shall be entitled to pass free through any or all of the above mentioned Canals, or through any portion thereof. O. C. May 17, 1897.

(*b.*) All articles, goods or marchandise, not enumerated above, shall be charged to class No. 4. O. C. April 18, 1873. Con. O. C. Oct. 26, 1889, sec. 86.

Sec. **8.** Goods shipped to any port west of the St. Lawrence Canals, tolls upon which have already been paid for passage through such canals, may be re-shipped from such port and be passed through the Welland Canal free of tolls, in the same way as if they had been shipped through direct in the first instance; and goods going eastward, having paid Welland Canal tolls, may be transhipped at any port on Lake Ontario, and thereafter pass free through the St. Lawrence Canals, as if they had been shipped through direct in the first instance. O. C. June 23, 1883. Con. O. C. Oct. 26, 1889, sec. 87.

Sec. **9.** Iron ore, kryolite or chemical ore, may pass through one section, or through all the canal sections aforesaid, for 5 cents per ton.

Sec. **10.** No let-passes shall be issued to steam tugs or other small vessels for less than 25 cents, as a minimum charge; but such vessels, not carrying freight or passengers, can obtain, on payment of $30 a season "Let-Pass," which will pass them up and down the canals as ofton as desired. O. C. April 18, 1873. Con. O. C. Oct. 26, 1889, sec. 86.

Sec **11.** All vessels owned or chartered by persons having contracts for the enlargements or repair of any of the canals, and employed by them in removing earth or carrying materials necessary for the prosecution of such works, shall be entitled to pass through such canals free of toll upon such vessel and cargo. O. C. April 22, 1884. Con. O. C. Oct. 26, 1889, sec. 35.

Sec. **12.** Government dredges and scows shall be permitted to pass through the canals free of tolls, but that such dredges and scows shall not be so passed as to interfere with the passage of other vessels of any kind whatever. O. C. May 18, 1891.

HARBOUR DUES.

Sec. **13.** Vessels receiving or discharging freight at the premises of the Welland Railway, at Ports Colborne or Dalhousie, are to be free from harbour dues; but all other vessels discharging or receiving cargo at Port Dalhousie, Port Colborne or Port Maitland, shall pay on every ton of freight so received or discharged, two cents. O. C. April 18, 1873. Con. O. C. Oct. 26, 1889.

WAY RATES.

Sec. **14.** The following way rates are to be levied on vessels and property passing the several subdivisions of the Canals:—

Welland Canal.

		Rate.
1.	From Port Maitland, Dunnville and Port Colborne to Port Robinson or Allanburg, not passing the lock, each way	½
2.	From Chippawa Cut, or any part thereof, to Dunnville, Port Maitland or Port Colborne	⅝
3.	From Dunnville to Port Colborne	½
4.	From Thorold to St. Catharines or Port Dalhousie	½
5.	From Maitland, Dunnville, Colborne or Port Robinson to Marshville and intermediate places.	⅜
6.	From Marshville or intermediate places to Port Maitland, Dunnville, Port Colborne and Port Robinson	⅜
7.	From Port Robinson to Allanburg or Thorold	⅜
8.	From Port Robinson to St. Catharines or Port Dalhousie	½
9.	From St. Catharines to Port Dalhousie	⅛
10.	From Dunnville to Maitland	¼
11.	From Port Robinson through the Lock and Chippawa Cut	¼
12.	Form Port Colborne to Port Maitland	½
13.	From Chippawa Cut through Lock to Port Robinson	¼
14.	From Colborne, Dunnville, Maitland and Marshville to Thorold	⅝
15.	From Colborne, Dunnville, Maitland and Marshville to St. Catharines	⅞
16.	Through the Chippawa Cut only	⅛
17.	Through the Port Robinson Lock only	⅛

St. Lawrence Canals.

Sec. **15.** The navigation is divided into four sections, viz., Cardinal, Cornwall, Beauharnois or Soulanges and Lachine. Tolls are to be levied on all vessels and property in proportion to the number of sections passed through.

Chambly Canal.

	Rate.
Sec. **16.** Vessels and property passing from Sorel to Chambly, to pay	⅓
Vessels and property passing from Chambly to St. Johns, to pay	⅔

Ottawa Canals.

Sec. **17.** The navigation is divided into three sections, viz., Grenville, Carillon and Ste. Anne's. Tolls are to be levied on all vessels and property in proportion to the number of sections passed through.

Rideau Canal.

Sec. **18.** The navigation of this canal is divided into three sections, viz., Ottawa, Smith's Falls and Kingston Mills. Vessels and freight passing one section are to be charged one-third; two sections, two-thirds. O.C. April 18, 1873. Con. O.C. Oct. 26, 1889, secs. 77, 78, 79, 80 and 81.—

Tay Canal to be part of the Rideau Canal and the following rates of tolls to be levied upon the said Tay Branch of the Rideau Canal system, viz.:—

Perth to Smith's Falls, 1 section, or one-third of Rideau Canal rates, each way.

Perth to Kingston, 2 sections, or two-thirds Rideau Canal rates, each way.

Perth to Ottawa Basin, 2 sections, or two-thirds Rideau Canal rates, each way.

Perth to River Ottawa, 3 sections, full Rideau Canal rates, each way. O.C. Sept. 27, 1890.

General.

Sec. **19.** (*a.*) Any fraction of a ton freight is to be charged one ton, and portions of sections are to be charged as a whole section on all the above canals.

(*b.*) The passing of saw-logs or other lumber through any of the canals, or sections thereof, shall be at all times governed by the regulations for their management. O.C. April 18, 1873. Con. O.C. Oct. 26, 1889, sec. 82.

Sec. 20.—STANDARD FOR ESTIMATING WEIGHTS, FOR CANAL TOLLS.

—	Tons.	—	Tons.
2,000 lbs. avoirdupois.	1	Sheep, 20	1
Per M. is per thousand feet	....	Stone, 12 cubic feet	1
Per mille is per thousand pieces	....	Stone, 1 cord	7½
Green fruit, 9 barrels are	1	Whisky, 4 barrels or 215 gallons	1
Ashes, 3 barrels are	1	Empty barrels, 10.	1
Bark, 4 cords	1	Barrel hoops, 10 mille	1
Beef, 7 barrels	1	Board and other sawed lumber, 600 feet board measure	1
Biscuit and crackers, 9 barrels	1		
Bricks, common, 1,000	2	Boat knees, 4	1
Butter, 22 kegs or 7 barrels	1	Firewood, 1 cord	3
Cattle, 3	1	Hop poles, 60 or cubic feet	1
Cement and water lime, 7 barrels	1	Shingles, 12 M. or bundles	1
Fire-bricks, 1,000	3	Split posts and fence rails, 1 mille	1
Fish, 7 barrels	1	Staves and headings, pipe, 1 mille	8
Flour, 9 barrels	1	" " W. India, 1 mille	4
Gypsum and manganese, 6 barrels	1	" " barrel, 1 mille.	2½
Horses, 2	1	" " salt barrel, 1 mille	0½
Lard and tallow, 7 barrels or 22 kegs	1	Saw-logs, standard, 1	0⅕
Liquors and spirits, 215 gallons	1	Square timber, 50 cubic feet	1
Liquids, all others, 215 gallons	1	Telegraph poles, 10, or 40 cubic feet.	1
Nuts, 9 barrels	1	Masts and spars, 40 cubic feet	1
Oysters, 6 barrels	1	Railroad ties, 16, or 50 cubic feet	1
Pork, 7 barrels.	1	All other woodenware, or partly manufactured wood, 40 cubic feet as per tariff	1
Refined oil in bulk, 250 gals., O.C., July 24, '00.	1		
Salt, 7 barrels	1	Traverses, 40 cubic feet, or 5 pieces.	1
Seeds, 9 barrels	1	Floats, 50 lineal feet	1

NOTE.—By the Weights and Measures Act, chapter 104 of the Revised Statutes of Canada, section 14, all the following named articles are to be estimated by the cental of 100 lbs.

The weight equivalent to a bushel being as follows:—Wheat, 60 lbs.; Indian corn, 56 lbs.; rye, 56 lbs.; pease, 60 lbs.; barley, 48 lbs.; oats, 34 lbs.; beans, 60 lbs.; clover seed, 60 lbs.; timothy seed, 48 lbs.; buckwheat, 48 lbs.; flax seed, 50 lbs.; blue grass seed, 14 lbs.; hemp seed, 44 lbs.; malt, 36 lbs.; castor beans, 40 lbs.; potatoes, turnips, carrots, parsnips, beets and onions, 60 lbs.; bituminous coal, 70 lbs.

TOLLS AT SHEDS AT LACHINE CANAL BASIN.

Sec. **21.** The following tolls shall be levied upon property stored at the sheds at the Lachine Canal Basin:—

			Cents.
Wheat and other grain,	per week,	per bushel	1
Meal	"	per barrel	4
Pork, beef, butter and lard	"	"	5
Muscovado sugar	"	per hhd., 10 cents; per brl	5
Liquors	"	per pipe, 15 cents; per pun per hhd., 10 cents; per qr. cask	12 7
Iron, bars	"	per ton	24
Iron, pig	"	"	12
Salt, except at the St. Gabriel sheds	"	per 100 minots	36
Salt at the St. Gabriel sheds, Montreal, after the first 48 hours	"	per bag	½
Bales, crates, cases, &c.	"	per ton weight or measurement	24
Coals	"	per chaldron	12

Sec. **22.** (*a.*) No charge shall be made for property stored in the sheds of the Lachine Canal Basin for the first forty-eight hours, after which period, except in the case of flour, the foregoing rate of storage for the use of the sheds are to be raised, levied and collected.

(*b.*) Articles unenumerated are to be charged according to the above rates as nearly as the same can be computed.

(*c.*) All property stored in the sheds remaining after the first forty-eight hours will be liable to one week's storage, although it should only have been stored for a portion of the same, and so on for each succeeding week.

(*d.*) The labour of receiving property into the sheds and delivering the same shall be at the expense of and be furnished by the owners of the property or their agents.

(*e.*) All property stored in these sheds shall be at the risk of the proprietor from damage by fire or otherwise.

(*f.*) All dues for storage shall be paid before the removal of the property. O. C. August 21, 1846, October 28, 1846. Con. O. C. Oct. 26, 1889, secs. 90 and 91.

Flour.

Sec. **23.** (*a.*) Flour shall be allowed to remain in the sheds for two whole days free of charge.

(*b.*) If kept there beyond two days or 48 hours, such flour shall be liable to a charge of one cent per day per barrel for the first four days after the expiration of the 48 hours of the exemption.

(*c.*) Should the flour be kept in the sheds beyond four days at one cent per day per barrel, it shall be liable to pay two cents per day per barrel for every day subsequent to the expiration of such four days.

(*d.*) Any part of a day shall be considered as one day. O. C. May 31, 1856. Con. O. C. Oct. 26, 1889, sec. 92.

WHARFAGE DUES ON COAL FOR LOCAL CONSUMPTION IN MONTREAL.

Sec. **24.** Coal for local consumption in Montreal, landed on canal property between Montreal Harbour and Côte St. Paul, from vessels other than sea-going, and entering the Lachine Canal from Montreal Harbour, shall be charged wharfage dues at the rate of five cents a ton.

Coal screening shall be charged 3 cents a ton. Con. O. C. Oct. 26, 1889, sec. 93. O. C. May, 18, 1892.

CHARGES FOR WHARFAGE ON FIREWOOD ON WHARFS AND BANKS OF LACHINE CANAL.

Sec. **25.** The following rates of tolls shall be collected as herein mentioned that is to say:—

(*a.*) Firewood landed on wharfs or banks of the Lachine Canal, or in boats, barges or other craft occupying any of the basins between Wellington Street Bridge and Lock No. 3, four cents per cord, and for every day the wood is allowed to remain in either the canal or basin, or on the wharfs or banks after the first five days, an additional charge of four cents per cord. O. C. August 7, 1860. Con. O. C. Oct. 26, 1889, sec. 94.

(*b.*) The clause next preceding shall not only apply tc the rates of toll to be collected on firewood on wharfs at Lachine and the Lachine Canal and basin, but are also extended and made applicable to the banks and grounds at Côte St. Paul and at Lachine. O. C. Jan. 27, 1862. Con. O. C. 1889, sec. 94.

CANAL BASINS IN MONTREAL PART OF MONTREAL HARBOUR.

Sec. **26.** Whereas under existing regulations for the collection of canal tolls, eastern bound vessels having paid the charges one way in full through the Welland Canal are chargeable one Section Canal Toll if re-entering the Lachine Canal;

And whereas vessels loaded with grain destined for the Montreal Harbour frequently unload only part of their cargoes on board sea-going vessels in the harbour, and re-enter the Lachine Canal for the purpose of unloading the balance of their cargoes either in elevators or mills located along the canal basins;

It is ordered that the Lachine Canal basins, within the Montreal city limits, be considered as part of the Montreal Harbour, in so far only as regards the collection of tolls on the class of vessels above referred to, which re-enter that portion of the canal for the purpose of unloading the balance of their cargoes, but that the same shall not apply any further, as in the event of vessels returning to the harbour to take cargo, in which case the usual toll shall be charged against them on passing out of the canal a second time into the harbour. O. C. Aug. 8, 1878. Con. O. C. Oct. 26, 1889, sec. 95.

PHOSPHATES.

Sec. **27.** Whereas vessels laden with grain for delivery in Montreal Harbour frequently carry also deck loads of phosphates, and being compelled to proceed at once to the harbour for the discharge of the grain, they pay tolls through to that point, subsequently re-entering the Lachine Canal for the storage of the phosphates, and in accordance with the existing regulations, paying canal dues a second time for such re-entry;

It is ordered that the Lachine Canal basins, within the Montreal city limits, be considered as part of the Montreal Harbour, for the purpose of the unloading of phosphates carried by vessels in addition to their grain cargoes as described in this section; it being, however, provided that in the event of their returning to the harbour to take cargo, the usual tolls shall be charged against such vessels on their passing out of the canal a second time. O. C. July 12, 1881. Con. O. C. Oct. 26, 1889, sec. 96.

Extract from the Act, Canada, 1894, c. 48, amending and consolidating the Acts relating to the Harbour Commissioners of Montreal.

HARBOUR RATES WHARFAGE DUES IN ALL BASINS OF THE LACHINE CANAL ON SEA-GOING VESSELS.

Sec. **28.** The corporation may, from time to time, levy such rates as are approved of by the Governor in Council, upon all goods landed or shipped in the harbour, moved by rail on the harbour tracks, or deposited within the harbour, except arms, ammunition and military accoutrements, and other munitions of war for the use of the Government or for the defence of the Dominion. 40 V., c. 53, s. 2, part 2. For the purposes of this section, the lower basins of the Lachine Canal shall be held to form part of the harbour of Montreal, and the corporation may levy from all vessels entering the same through the harbour for the purpose of discharging or loading there, except canal craft trading between Montreal and places above Montreal, the same rates as may be levied in the harbour and under the same regulations and penalties. In all other respects the said lower basins shall be and remain under the jurisdiction of the Minister of Railways and Canals. 18 V., c. 143, s. 18; 40 V., c. 53, s. 2, part 2.

All property delivered or received by sea-going vessels in the Lachine Canal basins at Montreal (except the old lower basin) shall be charged wharfage dues as follows:—

All goods, wares and merchandise not elsewhere specified	25 cents per ton.
Hay, straw, pig and scrap iron, pot and pearl ashes	20 "
Apples, crates and their contents, flour and meal, fish, meats, pitch, potatoes, tar, horses, neat cattle, sheep and swine	15
Ballast, clay, fire-bricks, gypsum, lime, marble, phosphate, sand, salt	10
Coal and coke, grain and seeds of all kinds	6
Special—Bricks, 10 cents per 1,000; cordwood, 5 cents per cord; lumber, 10 cents per 1,000 feet, board measure.	
Bullion specie	Free.
Coal screenings	3 "

Each entry shall pay not less than 5 cents.

All property landed on the canal wharfs for re-shipment, or transhipped in canal waters, shall pay one wharfage only.

Lumber upon which tolls have been paid for passage down the Lachine Canal, and which is reshipped from the wharfs or vessels into sea-going vessels, shall pay wharfage dues equal to one section of canal tolls, viz., 3¾ cents per 1,000 feet board measure. O.C. Jan. 26, 1883. Con. O.C. Oct. 26, 1889, secs. 98, 99, 100 and 101. O.C. May 18, 1892.

Sec. 29.—*Standard for Estimating Weights.*

Ashes, pot or pearl	3 brls. to 1 ton.
Apples, flour, meal, potatoes	9 " 1 "
Fish, meat, pitch, tar	7 " 1 "
Horses	2 to 1 ton.
Neat cattle	3 to 1 "
Sheep	15 to 1 "
Swine	10 to 1 "

O.C. April 1, 1881. Con. O.C. Oct. 26, 1889, sec. 102.

TOLLS ON FLOATED TIMBER, ETC., ENTERING THE BASIN AT LACHINE.

Sec. **30.** The following rates of tolls shall be collected on floated timber, lumber and firewood entering the basin at Lachine and Lachine Canal:—

Kinds of Timber.	For receiving Timber, &c., to include use of Basin and Wharf for one Month.	For each succeeding month during the Season of Navigation.	For Wintering in Basin or on Wharf.
	Cents.	Cents.	Cents.
Timber, square or round, of all kinds, above 12 x 12, per M cubic feet	25	20	35
Timber, round or flatted, of all kinds, under 12 x 12, per M lineal feet	20	15	30
Planks and boards to include all kinds of sawed lumber in rafts, per M feet, board measure	3	2	3
Saw logs, 12 feet long, if longer in same proportion per log	1	½	2
Floats, per 100	10	5	10
Traverses, per 100	10	5	10
Fence posts and rails, per M	10	5	10
Staves, barrel, per M	8	4	8
" pipe "	8	4	8
" West India, per M	8	4	8
Firewood on bank of canal between Lock No. 3 and Lock No. 5, and also on wharves in canal basin at Lachine	3	3	3

Note.

Sec. **31.** (*a.*) No allowance shall be made for fractional parts of a month or winter season.

(*b.*) The firewood shall be corded across the bank while being delivered from the boat in such manner and at such points as the superintending engineer may direct.

(*c.*) The rates on timber to take effect upon the completion of the booms in Lachine Canal. O.C. June 8, 1860. Con. O.C. Oct. 26, 1889, secs. 103 and 104.

CHARGES ON VESSELS WINTERING IN LACHINE CANAL.

Sec. **32.** The following rates per ton shall be charged for wintering vessels in the Lachine Canal viz.:—For each boat, barge, scow or other vessel of ten tons measurement or under, seventy cents per vessel for the entire winter, and every ten tons above the first ten, an additional rate of eight cents. O.C. Aug. 22, 1879. Con. O.C. Oct. 26, 1889, sec. 97.

CHARGES FOR WINTERING VESSELS IN RIDEAU CANAL.

Sec. **33.** The winterage dues for vessels wintering in the canal basin, at Ottawa, or other points along the line of the Rideau Canal, shall be as follows :—

In canal basin, Ottawa,	steamers	per season		$ 8 00
" "	barges	"		4 00
Inside locks	"	steamers	"	50 00
other stations	"		"	15 00

If the Minister of Railways and Canals deems it advisable, he is authorized to take security from parties wintering their vessels in locks against damage to Government property by fire. O.C. March 19, 1887. Con. O.C. Oct. 26, 1889, sec. 105.

CHARGES FOR WINTERING VESSELS IN THE OTTAWA RIVER CANALS AND LOCKS.

Sec. **34.** The charge for vessels wintering on the Ottawa River canals and locks, and the same is hereby prescribed accordingly, namely :

In Carillon Canal,	steamers	per season	$ 8 00
"	barges	"	4 00
Grenville Canal,	steamers	"	8 00
"	barges	"	4 00
Inside Locks, Ste. Anne, Carillon and Grenville Canals, steamers per season			25 00
" Culbute Canal, per season			15 00

Such security against damage by fire to be taken by way of bond as, in the opinion of the Minister of Railways and Canals, may seem desirable. O.C. Oct. 14, 1892.

Sec. **35.** No charges to be made for vessels wintering outside the locks of any government canal. O.C. Dec. 12, 1889.

CHARGES FOR REPAIRING VESSELS ON THE BANKS OF CANALS.

Sec. **36.** (*a.*) Persons using the banks of the Lachine Canal as a site for the repair of their vessels shall be subject to a charge of four dollars, payable in advance, for each vessel; the period during which such site may be occupied under any one payment being limited to six months, and permission for repairing being first obtained from the proper officer, in conformity with the existing canal regulations.

(*b.*) In the event of failure to remove vessels so occupying the banks at the expiration of the period named, no fresh permits having been obtained, such vessels may be sold under the 16th section of the canal regulations. O.C. March 5, 1880. Con. O.C. Oct. 26, 1889, sec. 106.

Sec. **37.** Rules with respect to the repairing of vessels on the banks of the Lachine Canal, the Beauharnois and the Chambly :—

(*a.*) Repairs shall only be executed at such points as may be indicated and approved by the superintending engineer.

(*b.*) For each vessel hauled up or beached for repairs, a charge of one dollar, over and above all other charges, shall be made, carrying the privilege of remaining one month, a further sum of one dollar being charged for each additional month, or fraction of a month, the vessel may remain.

(*c.*) In cases, however, where a vessel hauled up for repairs upon the canal bank remains there throughout the winter, a charge of four dollars only shall be made (in addition to the ordinary winterage dues), the period covered being from the 1st of November to the 1st of June, inclusive.

(*d.*) Any vessel remaining on the canal bank after having wintered thereon shall be charged at the rate of one dollar a month or fraction of a month of her subsequent stay.

(*e.*) Any vessel remaining more than one year on the bank of the canal shall for such time as she may remain in excess of that period pay at the rate of two dollars a month or fraction of a month throughout the whole year.

(*f.*) All charges shall be payable at the collector's office in advance on the first day of each month.

(*g.*) These rules shall be understood as applying to all cases where the canal bank is used in any manner for the repairs of vessels, whether such vessels are actually hauled up or not. O. C. August 6, 1881. Con. O. C. Oct. 26, 1889, sec. 107.

DRY DOCK CHARGES.

Trent Valley Canal.

Sec. **38.** The following tolls and dues shall be charged for the use of the dry dock at Bobcaygeon, and of any of the locks on the Trent Valley Canal, during the winter or other shorter period :—

For Vessels	Wintering.	Per day.	Per week.
Over 15 tons	$30 00	$4 00	$12 00
15 tons and under	20 00	3 00	10 00

(O. C. Oct. 31, 1890.)

Rideau Canal.

Sec. **39.** The following tariff of tolls and regulations shall be, and the same are hereby established for the use of the dry dock on the Rideau Canal at Ottawa:—

(1) Steamers entering dock	$ 8 00
Each day or portion of a day after day of entrance	2 50
(2) Barges entering dock	5 00
Each day or portion of a day after day of entrance	2 50
(3) Steam yachts or launches	5 00
Each day or portion of a day after day of entrance	2 50
(4) Boats wintering in the dry dock from the close to the opening of navigation	50 00
For every day such boat remains in the dock after the opening of navigation	8 00

(5) No vessel of any class shall be in the dock over six days after notice is given in writing by the lockmaster that the dock is required for another vessel unless a satisfactory agreement between all parties interested is arrived at.

(6) All entrances and discharge of vessels are covered by entrance fee.

(7) All drying off of vessels of all classes in the locks at Ottawa or Hartwell's during the season of navigation is prohibited unless for special reasons.

The owners of vessels of all classes to render the required assistance to open and close the gate under the supervision of the superintending engineer.

Vessel owners to supply all blocks, &c., to shove their boats up to make the necessary repairs and all refuse to be properly cleared out to the entire satisfaction of the lockmaster before leaving the dock.

(O. C. Dec. 28, 1893.)

Sec. **40.** The use of horses for towage purposes between the lower entrance of the Cornwall Canal and lock No. 20, be prohibited during the works of enlargement of that portion of the Cornwall Canal.

(O.C. Aug. 20, 1890.)

Sec. **41.** As the prohibition of the use of horses for towing purposes, between the lower entrance of the Cornwall Canal and Lock No. 20 during the progress of the works of canal enlargement, has entailed the use of tugs and consequently expenses to the parties concerned, that all tugs, used solely for the purposes of towing on the section in question, be permitted to pass free of toll, up and down the canal between the lower entrance of the canal and lock No. 20, until the completion of the enlargement of the works on that section. (O. C. Sept. 27, 1890.)

SPECIAL RATES FOR 1900 ONLY.

Sec. **42.** For season of 1900 the Canal Tolls for the passage of the following food products:—wheat, Indian corn, pease, barley, rye, oats, flax seed and buckwheat, for through passage eastward through the Welland Canal, be ten cents per ton, and for through passage eastward through the St. Lawrence Canals only, ten cents per ton; payment of the said toll of ten cents per ton through the Welland Canal to entitle these products to free passage through the St. Lawrence Canals, or any portion thereof. (O. C. Feb. 20, 1900.) Also special rates, are granted to grain, &c., carried on the O. A. & P. S. and Canada Atlantic Railway systems, from Depot Harbour to Coteau Landing and thence by Canal to Montreal, as follows, viz.:—Wheat, Indian corn, pease, barley, rye, oats, flaxseed and buckwheat, 2½ cents per ton, and all rolling and package freight, 5 cents per ton. (O. C. Feb. 20, 1900.)

Sec. **43.** *(a.)* That for the current season of navigation of 1900, there shall be allowed in the case of steamships specially chartered for the conveyance of excursion parties, going and coming the same day, a reduction of one-half of the usual passenger tolls for passage through the Government canals, it being distinctly understood that no freight is to be carried by the said steamers on such excursions. (O. C. June 12, 1900.)

Sec. **43.** *(b.)* Whereas the Canal Tolls payable for passage through the Welland and St. Lawrence Canals of barrel staves and headings, are 40 cents per 1,000 in the case of ordinary materials, such as those for sugar and flour barrels; while in the case of staves and headings for salt barrels the charge is 8 cents per 1,000 only.

And whereas application is made to have this distinction removed on the ground that sugar and flour cooperage is of the same weight as salt cooperage.

His Excellency in virtue of the provisions of chapter 38 of the Revised Statutes of Canada, intituled "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that Class 5 of the existing Tariff of tolls for passage through the Canals of the Dominion, established by the Order in Council of the 25th March, 1895, shall be and the same is hereby amended to the effect, and to that effect only, of removing the distinction between ordinary and salt barrel staves and headings, and making the tolls payable for these articles the same, namely, those at present charged on salt barrel staves and headings, on all the Canals of the Dominion. (O. C. May 28, 1897.)

SPECIAL RATES ON SAND AND STONE.

Sec. **43.** *(c.)* On the recommendation of the Acting Minister of Railways and Canals, the rate of toll on sand and stone used in the construction of the bridge being built at Cornwall by the Ottawa and New York Railway was reduced from 15 and 20 cents to 7½ and 10 cents respectively. (O. C. August 27, 1898.

PART VI

STEAM AND ELECTRIC RAILWAY STATISTICS

STEAM RAILWAY STATISTICS

OF THE

DOMINION OF CANADA

FOR THE YEAR ENDED JUNE 30, 1901

Compiled by Mr. Thomas Ridout, C.E., from sworn Returns furnished by the several Railway Companies

COLLINGWOOD SCHREIBER,

Deputy Minister and Chief Engineer of Railways and Canals.

TABLE showing the growth of the Railways from year to year, since the opening of the first line in 1836.

Year.	Miles in Operation.	Year.	Miles in Operation.
1835	0	1869	2,524
1836	16	1870	2,617
1837	16	1871	2,695
1838	16	1872	2,899
1839	16	1873	3,613
1840	16	1874	3,832
1841	16	1875	4,331
1842	16	1876	4,804
1843	16	1877	5,218
1844	16	1878	5,782
1845	16	1879	6,126
1846	16	1880	6,858
1847	54	1881	7,194
1848	54	1882	7,331
1849	54	1883	8,697
1850	66	1884	9,577
1851	159	1885	10,273
1852	205	1886	10,773
1853	506	1887	11,793
1854	764	1888	12,184
1855	877	1889	12,585
1856	1,414	1890	13,151
1857	1,444	1891	13,838
1858	1,863	1892	14,564
1859	1,994	1893	15,005
1860	2,065	1894	15,627
1861	2,146	1895	15,977
1862	2,189	1896	16,270
1863	2,189	1897	16,550
1864	2,189	1898	16,870
1865	2,240	1899	17,250
1866	2,278	1900	17,657*
1867	2,278	1901	18,140
1868	2,278		

NOTE.—*The year 1901 included 188 miles comprised in 13 Electric Railways which are shown in a separate statement of Electric Railways for the year ended June 30, 1901—Thus making an increase of the Steam Railways in operation at June 30, 1901, of 671 miles.

THE SUMMARY of Tables of Steam Railways for the Years ended June 30, 1900, and June 30, 1901.

—	Comparative Statement.	
	June 30, 1900 Steam Railways.	June 30, 1901 Steam Railways.
	$	$
Miles of railway completed (track laid)	17,636	18,294
" sidings	2,549	2,710
" iron rails in main line	126	110
" steel "	17,510	18,184
" " " (double track)	591	634
Capital paid (including the four following items)	991,186,646	1,042,785,539
Government (Dominion and Provincial) bonuses paid	169,645,925	177,640,765
" " " loans paid	20,869,264	20,613,489
" (Provincial only) subscription to shares paid	300,000	300,000
Municipal aid paid	15,711,542	16,310,253
Miles in operation	17,469	18,140
Gross earnings	70,204,353	72,898,749
Working expenses	47,381,689	50,368,726
Net earnings	22,822,664	22,530,023
Passengers carried	17,104,343	18,385,722
Freight carried (tons)	35,713,222	36,999,371
Train mileage	52,621,524	53,349,394
Passengers killed	7	16
Number of elevators	239	253
" guarded level crossings—public roads	165	193
" unguarded " "	12,625	12,422
" overhead bridges	421	427
" public roads under crossings	Not stated.	280
" level crossings of other railways	219	233
" junctions with other railways	335	347
" " branch lines	244	230
" engines owned	2,170	2,316
" " hired	103	117
" sleeping and parlour cars owned	235	243
" " " hired	3	15
" first-class cars owned	1,038	1,087
" " hired	65	72
" second-class and immigrant cars owned	640	636
" " " hired	1	13
" baggage, mail and express cars owned	623	729
" " " hired	29	86
" refrigerator cars owned	736	728
" " hired	207	273
" cattle and box freight cars owned	39,112	42,166
" " " hired	3,426	3,738
" platform cars owned	14,928	15,773
" " hired	679	575
" coal and dump cars owned	5,737	6,557
" " hired	133	218
" conductors' vans owned	1,055	1,019
" " hired	1	21
" tool cars owned	*872	*948
" " hired	....	7
" snow ploughs owned	293	301
" " hired	....	3
" flangers owned	309	320
" " hired	....	3

* Including steam shovels, pile drivers, water tank cars, store cars, gravel cars, boarding cars, &c.

Number of cars with air brakes owned	48,072
" " hired	4,342
" automatic couplers owned	56,423
" " hired	4,711

NOMINAL Capital paid up to June 30, 1901.

——	Miles constructed.	Amount.	Per Mile.	Remarks.
		$ cts.	$ cts.	
Ordinary share capital	18,294	291,340,772 62	15,925 48	
Preference "	18,294	133,073,541 39	7,274 16	
Bonded debt	18,294	391,696,522 93	21,411 20	
Aid from Dominion Government	18,294	166,158,731 11	9,082 69	
" Ontario "	6,605	7,839,578 04	1,186 92	Equal to an average of $1,770.83 per mile on the total mileage.
" Quebec "	3,544	16,347,392 64	4,612 69	
" New Brunswick Government	1,444	4,529,040 71	3,136 43	
" Nova Scotia Government	943	1,801,108 53	1,909 98	
" Prince Edward Island Government	209	....	....	
" Manitoba Government	2,056	1,840,902 75	895 38	
" British Columbia Government	1,408	37,500 00	26 63	
" North-west Territories Government	2,085	....	....	
" Municipalities in Ontario	6,605	12,102,164 37	1,832 27	Equal to an average of $891.56 per mile on the total mileage.
" " Quebec	3,544	2,942,929 62	830 40	
" " New Brunswick	1,444	336,500 00	233 03	
" " Nova Scotia	943	270,559 17	286 91	
" " Prince Edward Island	209	....	....	
" " Manitoba	2,056	595,600 00	289 69	
" " British Columbia	1,408	37,500 00	26 63	
" " North-west Territories	2,085	25,000 00	12 00	
Capital from other sources	18,294	11,810,194 91	645 58	
Total capital paid	18,294	1,042,785,538 79	57,001 50	

GOVERNMENT and Municipal Loans, Bonuses, &c., promised to Railways completed and under construction up to June 30, 1901.

——	$ cts.
Dominion Government	174,501,269 36
Ontario "	8,709,578 04
Quebec "	17,700,936 50
New Brunswick Government	4,544,439 71
Nova Scotia "	2,619,316 53
Manitoba "	1,841,952 75
British Columbia "	37,500 00
Municipalities in Ontario	12,198,164 37
" Quebec	4,881,574 00
" New Brunswick	361,500 00
" Nova Scotia	485,559 17
" Manitoba	595,600 00
" British Columbia	37,500 00
North-west Territories	25,000 00
	228,539,890 43

TOTAL FATAL ACCIDENTS for Year ended June 30, 1901.

——	Passengers Killed.	Employees Killed	Others Killed.	Total Killed.
Falling from cars or engines	4	17	4	25
Jumping on or off trains in motion	7	8	10	25
At work making up trains		10		10
Putting heads or arms out of window		3		3
Coupling cars		6		6
Collisions and derailments	3	23	3	29
Striking bridges				
Walking or being on track	2	30	143	175
Explosions		1		1
Other causes		20	23	43
Total killed	16	118	183	317

LAND GRANTS made by Governments to Railways, completed or under construction, up to June 30, 1901.

No.	Act authorizing Subsidy.	Name of Railway Company.	Government.	Mileage Subsidized.	Acres granted per Mile.	Total Acres granted.	Acres sold by Railway Companies.	Amount Realized.
								$ cts.
1	48 49 Vic., c. 60 50-51 Vic., c. 22 52 Vic., c. 2.	Alberta Railway and Coal Co.—Main line, Dunmore to Lethbridge	Dominion.	109·50	6,400	700,800		
2	52 Vic., c. 4 52 Vic., c. 3	Alberta Railway and Coal Co, from Lethbridge to International Boundary	"	64·62	6,400	413,568	884,048	1,164,232 83
3	53 Vic., c. 4	Calgary and Edmonton Railway	"	340·00	6,400	2,176,000	1,481,046	*
4	58 Vic., c. 4	‡Canadian Northern, comprising— Lake Manitoba Railway and Canal Company	"	125·00	6,400	800,000		
5	47 Vic., c. 25	Winnipeg Great Northern Railway	"	900·00	Div. A., 6,400 " B., 12,800 " C., 6,400	8,480,000	71,702	231,035 31
6	53 Vic., c. 4	Manitoba and South-eastern Railway	"	98·00	6,400	627,200		
7	44 Vic., c. 1	Canadian Pacific Railway—Main line	"			25,000,000	†6,793,014	10,189,521 00
8	53 Vic., c. 4	C. P. R.—Deloraine and Napinka Branch	"	18·01	6,400	115,264		
9	53 Vic., c. 4.	C. P. R.—Glenboro' and Souris Branch	"	45 24	6,400	289,536	4,746,590	15,061,127 62
10	53 Vic., c. 4 54 Vic., c. 10	C. P. R.—Kemnay and Estevan Branch	"	156·86	6,400	1,003,904		
11	57-58 Vic., c. 6	C. P. R.—Pipestone Branch	"	31·30	6,400	200,320		
12	49 Vic., c. 11	Great North-west Central Railway	"	50·00	6,400	320,000		
13	48-49 Vic., c. 60	Manitoba and North-western Railway—Main line	"	430·00	6,400	2,918,400		
14	49 Vic., c. 11	" " Branch from Binscarth.	"	26·00	6,400		1,187,487	1,950,522 10
15	57-58 Vic., c. 6	Saskatchewan and Western Railway	"	15·47	6,400	99,008		
16	48-49 Vic., c. 10 54-55 Vic., c. 10	Manitoba and South-western Colonization Railway	"	218 25	6,400	1,396,800	Town sites 538,969	178,713 91 2,266,807 00
17	48-49 Vic., c. 60 50-51 Vic., c. 23	Qu'Appelle, Long Lake and Saskatchewan Railway	"	253·96	6,400	1,625,344	128,000 998,230	121,600 00 *
18	52 Vic., c. 4. 54 Vic., c. 9.	Red Deer Valley Railway	"	55·00	6,400	352,000		No return.
19		Yarmouth and Annapolis—in Dominion Atlantic Ry	Nova Scotia			150,000	No return	of lands sold.
20		Columbia and Kootenay Railway	British Columbia			190,000	15,344 Town sites	35,484 58 223,063 15
21		Columbia and Western Railway	"			2,500,000	No return	of lands sold.
22		Esquimalt and Nanaimo Railway	"			1,900,000	Town sites 275,952	36,210 48 841,182 80
23		Kaslo and Slocan Railway	"			198,240	Town sites 3,643	6,342 33 17,762 00
24		Nelson and Fort Sheppard	"			608,256	Town sites 9,011	263,732 51 63,134 15

* Again, after efforts to obtain a statement of the amounts realized from the sale of these lands, the companies have failed to give the information, the return, therefore, in this respect, is incomplete. † Sold to the Dominion Government at $1.50 per acre. ‡ By 62-63 Vic., (Session of 1899) caps 57, 75 and 80, the Lake Manitoba Railway and Canal Co., the Winnipeg Great Northern Ry., the Manitoba and South-eastern, and Ontario and Rainy River Ry., were amalgamated under the title of the Canadian Northern Ry., all the rights of these four companies being vested in the new company.

Table showing Location of the Steam Railways of the Dominion of Canada, June 30, 1901.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Alberta Railway and Coal Co.	From Lethbridge in District of Alberta, N.W.T., to Coutts, on International boundary, 3 ft. gauge. The portion from Dunmore to Lethbridge, 107 miles, was changed to 4 ft. 8½-in. gauge and sold to Can. Pac. Ry., 29th Nov., 1893.		64·62
Albert Southern	Harvey Branch Junction to Alma, N.B.	16·00	
	Harvey Branch Albert to Harvey Bank, N.B.	3·00	19·00
Algoma Central and Hudson Bay.	Sault Ste. Marie to Spruce Lake	70·00	
	Branch—Michipicoten to Helen Mines	11·00	
	" Josephine Jct. to Josephine Mine	10·50	
	42 miles in operation. 49·50 miles under construction.		91·50
Baie des Chaleurs in Atlantic and Lake Superior System	Metapedia Station on C.P.R. to Paspebiac, 98 miles in operation		100·00
Bay of Quinté Railway and Navigation Coy	Deseronto, on Bay of Quinté, Lake Ontario, to Deseronto Junction, Grand Trunk Railway		4·00
Bedlington and Nelson	Kuskonook to Bedlington, B.C.		15·20
British Yukon	White Pass to White Horse Spur, B.C., and Branch to White Horse		90·45
Buctouche and Moncton	Moncton, on Intercolonial Railway, to Buctouche, N.B.		32·00
Brockville, Westport and Sault Ste. Marie	Brockville to Westport, Ont.		45·00
Calgary and Edmonton	Calgary to Edmonton	190·97	
	" McLeod, District of Alberta	104·96	295·93
Canada Atlantic, including Ottawa, Arnprior and Parry Sound Ry	City of Ottawa to Junction with Grand Trunk at Lacolle and U.S. boundary. Crosses the St. Lawrence at Coteau by bridge. Connects with Grand Trunk Railway at Coteau and Lacolle, and Ottawa to Depot Harbour, Lake Huron, near Parry Sound		400·00
Central Counties	From Glen Robertson, on Canada Atlantic to Hawkesbury, Ont	21·00	
Leased to Canada Atlantic	South Indian, on Canada Atlantic, to Rockland	16·00	37·00
Canadian Northern	Gladstone to Winnipegosis	125	
	Sifton Junction to Erwood	177	
	Winnipeg to boundary of Minnesota	108	
	Dauphin to Grand View	27	
	Port Arthur to Stanley	19	
	Stanley to Gunflint Lake	66	522·00
Canada Coals and Railway Co., formerly Joggins	Maccan Station, I.C.R., to Joggins Coal Mine		12·00
Canada Southern	Main Line—Windsor, Ont., to Suspension Bridge	226·18	
	Amherstburg Branch—Essex Centre to Amherstburg.	16·83	
	St. Clair Branch—St. Clair Junction to Courtright	62·63	
	Fort Erie Branch—Fort Erie to Welland Junction	17·50	
	Erie and Niagara Branch—Old Fort Erie to Niagara.	30·60	
	Oil Springs Branch—Oil Springs to Oil City	5·50	
Leased	Sarnia, Chatham and Erie—Oil City to Petrolea.	7·00	
"	Leamington and St. Clair—Comber to Leamington	15·95	382·19

TABLE showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.		Distance.	
			Miles.	Total.
Canada Eastern	Late Northern and Western of New Brunswick			
	Gibson, opposite City of Fredericton to Chatham Junction, I.C.R.		107·00	
	Chatham Junction to Chatham and Logieville via Nelson		20·00	
	Blackville to Indiantown		9·00	
Canadian Pacific:				136·00
Owned	Main Line—Quebec to St. Martin's Junction		159·80	
	〃 Montreal to Ottawa		120·30	
	〃 Ottawa to Bonfield		223·60	
	〃 Bonfield to Vancouver		2,561·00	
				3,064 70
	Branches—Dunmore to Crows Nest		211·90	
	〃 Piles Junction to Grand Piles		26·90	
	〃 Berthier Junction to Berthier		2·00	
	〃 Joliette Junction to St. Félix		16·80	
	〃 Ste. Thérèse Junction to St. Jérome		13·60	
	〃 〃 to St. Eustache		6·00	
Montreal and Western	〃 St. Jérome to Labelle		66·90	
	〃 St. Lin Junction to St. Lin		15·00	
	〃 Buckingham Stn. to Buckingham Village.		4·20	
Brockville and Ottawa Railway	〃 Carleton Junction to Brockville		45·00	
	〃 Sudbury to Sault Ste. Marie		180·60	
	〃 Sudbury to Copper Mines		5·60	
	〃 Dyment to Ottamine		7·00	
	〃 Molson to Lac du Bonnet		22·00	
	〃 Winnipeg Junction to Emerson		64·50	
	〃 〃 to Manitou		101·10	
	〃 Rosenfeldt to Gretna		13·70	
	〃 Winnipeg to West Selkirk		22·60	
	〃 Air Line Junction to Foxton		37·50	
	Souris Branch.—Kenmay to Estevan		156·20	
	Glenboro' to Souris		45·70	
	Deloraine to Napinka		18·60	
	Branches—Monteith Junction to Arcola		95·80	
	〃 North Portal to Pasqua		160·30	
	〃 New Westminster Junction to New Westminster		8·20	
Lake Témiscamingue Colonization	〃 Mattawa to Kippewa		45·80	
	〃 Mission Junction to Mission		10·00	
	〃 Revelstoke to Arrow Head		27 70	
	〃 Vancouver to Coal Harbour		1·20	
	〃 Three Forks to Sandon		4·20	
	〃 Wood Bay to Snowflake		16·30	
	〃 Cranbrook to Kimberly		19·40	
	〃 Deloraine to Waskada		17·20	
	Total mileage owned		4,554·20	
Leased Lines	Atlantic and North-west (in Canada)—			
	South end Lachine Bridge to Maine boundary, Que	182·50		
	Renfrew Jct. to Eganville, Ont	18·90		
	St. Lawrence and Ottawa—		201·40	
	Ottawa to Prescott, Ont	51·80		
	Chaudière Junction to Sussex St., Ottawa.	6·60		
	Ontario and Quebec—		58·40	
	Montreal (Windsor St.,) to Daley's cut	6·70		
	Mile End to Daley's cut	7·40		
	Montreal Jct. to South End Lachine Bridge	3·60		
	〃 Toronto Junction	334·00		
	St. Luc Junction to Western Junction	1·70		
	Toronto Junction to Strachan Avenue	3·20		
	Leaside Junction to Union St., Toronto	5·30		
	London to Windsor	112·60		
			474·50	

Table showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.		Distance.	
			Miles.	Total.
Canadian Pacific—*Continued.*				
Leased lines	Credit Valley—			
	Toronto Junction to St. Thomas....	116·80		
	Streetsville Junction to Melville Jct	31·60		
	Cataract to Elora........................	27·30		
		———	175·70	
	West Ontario Pacific—Woodstock to London........		26·60	
	Toronto, Grey and Bruce—			
	Toronto Junction to Owen Sound.........	116·80		
	Orangeville Junction to Teeswater.......	69·80		
	Glenannan to Wingham..........	4·50		
		———	191·10	
	Guelph Junction—			
	Guelph Junction on Credit Valley Ry. to Guelph..		15·25	
	Montreal and Lake Maskinongé—			
	St. Félix to St. Gabriel de Brandon..............		12·90	
	Montreal and Ottawa—			
	Vaudreuil to Jct. with the Canada Atlantic	86·20		
	Rigaud to Pt. Fortune...........	7·00		
		———	93·20	
	Cap de la Madeleine—			
	From Main Line C.P.R., at Junction with Piles branch to Cap de la Madeleine............		2·32	
	New Brunswick—			
	Woodstock to Maine boundary..	59·40		
	Newburg Junction to Fredericton.........	58·40		
	Aroostook Junction to Edmondston......	57·20		
	St John and Maine—	———	175·00	
	Vanceboro to McAdam Junction	6·30		
	McAdam Junction to Fairville....	81·80		
	Fairville to Carleton.	4·00		
	St. John Bridge and Railway Extension—	———	92·10	
	Fairville to St. John............................		2·00	
	Fredericton—			
	Fredericton Junction to Fredericton........		23·10	
	New Brunswick and Canada—			
	McAdam Junction to St. Stephen.........	33·90		
	Watt Junction to St. Andrews............	27·50		
	McAdam Junction to Woodstock.........	50·80		
	Debec Junction to Maine boundary.......	5·00		
	St. Stephen and Milltown Ry.—	———	117·20	
	St. Stephen to Milltown.........................		4·64	
	Tobique Valley—			
	Perth Centre to Plaster Rock.		28·00	
	Manitoba and North western—			
	Portage la Prairie to Yorkton............	222·90		
	Binscarth to Russell.......	11·30		
	Saskatchewan and Western—Minnedosa to Rapid City..........	18·40		
	Manitoba South-western Colonization—	———	252·60	
	Manitou to Deloraine	100·40		
	Winnipeg to Glenboro'.........	101·90		
	Elm Creek to Carman..................	12·10		
		———	214·40	
	Great North-west Central, Chater to Miniota......		71·00	
	Columbia and Kootenay—			
	Nelson to Robson	27·70		
	Slocan Junction to Slocan City..	32·00		
	To Mouth of Kootenay River.	0·80		
		———	60·50	
	British Columbia Southern—			
	Crows Nest to Kootenay Landing.........	182·00		
	Nelson to Proctor.......................	20·20		
		———	202·20	

Table showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.		Distance.	
			Miles.	Total.
Canadian Pacific—*Continued.* Leased lines	Shuswap and Okanagan—			
	From Junction with C. P. R. at Sicamous to Lake Okanagan		50·80	
	Nakusp and Slocan—			
	Nakusp on Arrow Lake to Three Forks of Carpenter's Creek, B.C.		36·30	
	Columbia and Western—			
	Robson to Rossland	32·10		
	Trail to Smelter Junction	2·00		
	Rossland to LeRoi	1·30		
	West Robson to Midway	99·00		
	Mining Spurs	23·50		
			157·90	
	Total mileage leased		....	2,738·11
	" owned		....	4,554·20
	" in Can. Pac. system		....	7,292·31
Canadian Government Railways.	Intercolonial—			
	Halifax to Point Lévis (via Harlaka)	674·87		
	Dartmouth to Windsor Junction	12·12		
	Truro to Sydney	214·17		
	Mulgrave to Point Tupper Ferry	·90		
	North Sydney Junction to North Sydney	4·43		
	New Glasgow to Pictou Landing	7·57		
	Stellarton to Oxford Junction	79·63		
	Brown's Point to Pictou	1·70		
	Pugwash Junction to Pugwash Station	4·70		
	Painsec Junction to Pt. du Chêne	11·38		
	Moncton to St. John	89·22		
	Derby Junction to Indiantown	13·51		
	Dalhousie Branch	5·97		
	St. Charles Junction to Chaudière Junction (via St. Henri)	16·38		
	Hadlow to Chaudière Curve	5·66		
	Moncton and Chaudière Branches	1·55		
	Freight Branches	27·57		
			1,171·33	
	Windsor Branch (32 miles) of I. C. Ry. is operated by Dominion Atlantic Ry.			
	Drummond County—			
	Chaudière to Ste. Rosalie Jct. with Grand Trunk		115·93	
	St. Leonard to Nicolet and Balls Wharf on St. Lawrence		14·68	
	Prince Edward Island—			1,301·94
	Main Line—Alberton to Charlottetown	104·30		
	Royalty Junction to Georgetown	41·00		
	Branch—Mount Stewart to Souris	38·40		
	" Alberton to Tignish	13·30		
	" Emerald to Cape Traverse	12·00		
			209·00	1,510·94
Caraquet	From Gloucester Junction, Intercolonial Railway, 5 miles south of Bathurst Station, easterly along the south shore of Baie des Chaleurs to Shippigan Harbour, N.B.		....	68·0
Carillon and Grenville	Carillon to Grenville, Que., connecting at both termini with Ottawa River Navigation Company's steamers (Gauge, 5 ft. 6 in.)		....	13·00
Central (Nova Scotia), formerly Nova Scotia Central.	From Middleton on the Windsor and Annapolis Railway to town of Lunenburg, on the Atlantic coast, N.S.		....	74·00

TABLE showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Central Ontario	From Picton, in Prince Edward County, to Bancroft	117·00	
	Branch, Ormsby Jct. to Coe-Hill Iron Mines, Wallaston, County of Hastings; connects with Grand Trunk at Trenton, Midland Railway, 2 miles west of Stirling, and with Ontario and Quebec, in Township of Rawdon	8·00	125·00
Central Railway of New Brunswick	From Norton Station, on the Intercolonial Railway, to Chipman	44·66	
	Branch to Elkin Mines	1·00	45·66
Coast Line, Nova Scotia, now Halifax and Yarmouth	Yarmouth towards Halifax, 240 miles, of which 50·10 miles are in operation and 61 miles under construction	....	50·10
Cobourg, Northumberland and Pacific	From Cobourg, Ont., to Junction with Central Ontario Railway, 49 miles under construction	....	
Cumberland Railway and Coal Company (formerly Spring Hill and Parrsboro')	Spring Hill Junction, Intercolonial Railway, to Spring Hill Coal Mines, N.S., and Parrsboro', on the Bay of Fundy	......	32·00
	Spring Hill and Oxford Branch, 14 miles from Spring Hill Mines to Oxford Village on the Oxford and New Glasgow Branch, I.C.R., not in operation.		
Dominion Atlantic, comprising Windsor and Annapolis, Yarmouth and Annapolis and Cornwallis Valley and lease of Windsor Branch of Intercolonial	Windsor to Annapolis, N.S.	84·00	
	Annapolis to Yarmouth	87·00	
	Branches—		
	Wilmot to Forbrook	3·50	
	From Kentville to Kingsport, on Basin of Minas (formerly Cornwallis Valley Railway)	14·00	
	Windsor Branch of I C.R.—Windsor to Windsor Junction, Intercolonial Railway, 14 miles from Halifax, leased	32·00	220·50
Elgin and Havelock	From Elgin, County of Albert, N.B., to Petitcodiac Junction with Intercolonial Railway; thence to Havelock in County of King's, N.B	27·00	
	Havelock to Keith's Mills	1·00	28·00
Esquimalt and Nanaimo	Victoria to Wellington, Island of Victoria	....	78·00
Fredericton and St. Mary's Railway Bridge	Over the St. John River, connecting the Fredericton Railway, at Fredericton, with the New Brunswick Railway, and Canada Eastern Ry., at St. Mary's	......	1·33
Grand Trunk (owned)— Main Line	Point Edward to Point Levis and Boundary Line, Vermont	544·40	
	York to Sarnia Tunnel	175·70	
	Suspension Bridge, Niagara Falls to Windsor	229·81	949·91
Branches, Eastern Division	Arthabasca Branch	35·34	
	St. Lambert to Ft. Covington (Boundary)	67·20	
	Brosseaus to Rouse's Point (Boundary)	36·79	
	St. Isidore to Province Line	24·15	
	St..Martine to Valleyfield	19·12	
	Bonaventure to Dorval	10·12	
	Jacques Cartier Union Ry	6·54	
	St. Paul Branch	1·08	
	St. Henri curve	0·31	
	Whart Branch, Montreal	0·85	
	Wharf Branch, Lachine	0·68	
	Kingston Branch	2·25	204·43

Table showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Grand Trunk (owned)—*Con.*			
Northern Division	Belleville Harbour to Midland	163·96	
	Madoc Junction to Eldorado	21·68	
	Port Hope to Peterboro'	30·57	
	Peterboro' to Lakefield	9·56	
	Millbrook Junction to Omemee Junction	15·12	
	Chemong Branch	3·00	
	Blackwater to Coboconk	36·19	
	Medonte Tramway	0·75	
	Scarboro Junction to Haliburton	114·82	
	Whitby Harbour to Manilla Junction	33·71	
	Stouffville to Jackson's Point	26·91	
	North Parkdale to Nipissing Junction	218·31	
	Muskoka Wharf Branch	1·00	
	Burlington Junction to Allandale	84·00	
	Allandale to Meaford	51·80	
	Colwell to Penetang	33·30	
	Beeton Juncton to Lake Junction	39·20	
	Hillsdale Tramway	8·28	
		———	892·16
Middle Division	Blackwell to Point Edward	5·21	
	Galt to Elmira	25·02	
	St. Mary's to London	21·13	
	Toronto Belt Line	12·79	
	Bathurst St., Toronto to Hamilton	37·95	
	Port Dover to Hamilton	40·25	
	Burlington Beach Line	11·33	
	Stoney Creek and Gages connections	2·56	
	Komoka to Sarnia	50·85	
	Sarnia to Point Edward	2·67	
	Petrolia Branch	4·71	
	Fort Erie to Glencoe	145·55	
	Glencoe to Kingscourt	21·01	
	Port Colborne to Port Dalhousie	25·14	
	Clifton to Port Robinson	9·75	
	Welland Junction	0·20	
	Goderich to Goderich Harbour	1·00	
	Harrisburg to Tilsonburg Juncton	42·54	
	Port Dover to Tavistock	55·68	
	Simcoe to Port Rowan	17·00	
	Harrisburg to Southampton	128·44	
	Palmerston to Durham	26·73	
	Harriston to Wiarton	63·97	
	Stratford to Palmerston	36·60	
	Listowell to Kincardine	57·66	
	Hyde Park to Wingham	68·88	
	Cobourg to Harwood (not in operation)	15·00	
		———	929·62
			2,976·12
Leased and partly owned	Buffalo and Lake Huron Ry		
	Fort Erie to Goderich	162·00	
	Owen Sound Branch		
	Park Head to Owen Sound.,	12·42	
		———	174·42
Leased or rented	Wharf Branch, Montreal		3·44
			3,153·98
St. Clair Tunnel and approaches.	Under the St. Clair River, between Sarnia and Port Huron—connecting the Grand Trunk Railway with railroads in State of Michigan		2·23
	(Length of tunnel between portals 6,000 ft., cylindrical in section with clear inside diameter of 19 ft. 10 inches).		

TABLE showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Great Eastern in Atlantic and Lake Superior system	Constructed from junction with South eastern Railway at Yamaska to River St. Francis	6·00	
	Constructed from Nicolet to Junction with Grand Trunk Railway at St. Grégoire	7·00	
	Yamaska to Sorel	10·00	
			23·00
Great Northern, including Lower Laurentian	From Riv. à Pierre Jct. with Quebec and Lake St. John Ry. to Hawkesbury	169·38	
	From Shawenegan Junction to Shawenegan Falls	3·98	
	From St. Jérôme Junction to St. Jérôme	1·74	
			175·10
Gulf Shore	Junction with Caraquet Railway at Pokemouche to Tracadie operated by Caraquet Ry		16·78
Hampton and St. Martin, formerly St. Martin and Upham	From Hampton on Intercolonial Ry. to St. Martin, County of St. John, N.B., on Bay of Fundy		29·00
Hereford	From International Boundary to Dudswell, County Wolfe, connects with Canadian Pacific Railway at Cookshire, Maine Central at International boundary, and with Quebec Central at Dudswell	48·50	
	Dudswell to Lime Quarries (Dominion Lime Company)	4·80	
			53·30
Interprovincial Railway Bridge and approaches	Across the Ottawa River at City of Ottawa		1·30
Irondale, Bancroft and Ottawa	From Junction with Grand Trunk Railway, near Kinmount Station, to Bancroft Station		48·00
Inverness and Richmond	From Port Hastings to Broad Cove, Cape Breton		56·50
	(Under construction from Port Hastings to Junction with Intercolonial Ry. 4·50 miles.)		
Kaslo and Slocan	From Kaslo to Sandon, B.C.	28·80	
	From Junction to Cody	3·00	
			31·80
Kent Northern	Richibucto, N.B., to Kent Jct. Intercolonial Railway	27·00	
St. Louis and Richibucto	Richibucto to St. Louis	7·00	
			34·00
Kingston and Pembroke	Main Line Kingston to Renfrew	103·10	
	Glendower Branch—Bedford to Zanesville Mine	4·00	
	Robertsville Branch—To Robertsville Mines	1·00	
	Branches—To Doran's Mills, Charcoal Works McLaren's Mills, Bethlehem Iron Mines, Lavant Mills, Clyde Forks Mills, Wilson's Mine, Caldwell's Mills, William's Mine, Cameron Bay	4·75	
	(Connects with Grand Trunk at Kingston, Canadian Pacific at Sharbot Lake and at Renfrew.)		
			112·85
Kingston, Napanee and Western	Amalgamated with Bay of Quinté Railway:		
	Napanee to Tamworth	28·50	
	Yarker to Harrowsmith	7·00	
	Tamworth to Tweed	20·95	
	Harrowsmith to Sydenham	4·37	
			60·82
Lenora Mount Sicker	Lenora Mines to Mount Sicker		6·25
Lotbinière and Mégantic	Lyster Station, Grand Trunk, to St. Jean des Chaillons		30·34
L'Assomption	L'Epiphanie Station, C.P.R., to l'Assomption		3·33
Lake Erie and Detroit River	Walkerville, Ont., to Ridgetown	84·22	
Erie and Huron	Rondeau to Sarnia	71·50	
			155·72
London and Port Stanley	London to Port Stanley on Lake Erie		24·00
Manitoulin and North Shore	Sudbury to Gertrude Mines	14·00	
	Stanley Jct. to Spanish River	1·50	
			15·50

TABLE showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Midland of Nova Scotia (formerly Stewiacke Valley)	From Windsor to Truro, N.S.—57½ miles under construction	....	
Montfort and Gatineau Colonization	From Junction with Montreal and Western near St. Sauveur to Arundel	....	33·00
Massawippi Valley	From Lennoxville to Vermont boundary, there connecting with Connecticut and Passumpsic Rivers Railway; also connects with Grand Trunk and C.P.R., at Lennoxville	31·95	
	Branch—Stanstead Junction to Stanstead	3·51	
			35·46
Montreal and Vermont Junction	From Junction with Stanstead, Shefford and Chambly Railway, 2¼ miles east of St. Johns, P.Q., to Junction with Vermont and Canada Railway, at Vermont boundary; also connects at Stanbridge with Lake Champlain and St. Lawrence Junction Railway	....	23·60
Montreal, Portland and Boston, now Montreal and Province Line	Junction with Grand Trunk at St. Lambert to Farnham	32·00	
	Marieville to St. Césaire	8·60	
			40·60
Montreal and Atlantic (formerly South-eastern)	Main Line—West Farnham to Richford on International boundary	33·80	
	Northern Division—Sutton Junction to Sorel	95·50	
	Between Newport and Richford—Part of Line in Canada	10·00	
		139·30	
	Leased—Lake Champlain and St. Lawrence Junction—Stanbridge to St. Guillaume	60·70	
			200·00
	(Connects with Connecticut and Passumpsic, Grand Trunk and Stanstead, Shefford and Chambly Rys.).		
Nelson and Fort Sheppard	From Five Mile Point to Fort Sheppard on International boundary, B.C.	......	54·70
New Glasgow Iron, Coal and Railway Company, now Nova Scotia Steel Co.	From Ferrona Junction, I.C.R., to Sunny Brae	....	12 50
New Brunswick and Prince Edward Island	From Sackville Station, Intercolonial Railway to Cape Tormentine	....	36·00
New Westminster Southern	Douglas to New Westminster	......	24·10
Northern Pacific and Manitoba	Winnipeg to International boundary	65·94	
	Portage Junction to Portage la Prairie	52·52	
	Morris to Brandon	145·24	
	Departure to near Hartney	50·94	
	Connection with C.P.R. at Winnipeg	1·24	
	Spurs to Industries	4·63	
			320·51
Nosbonsing to Nipissing	From Lake Nosbonsing to Lake Nipissing	......	5·50
Nova Scotia Southern	Under construction 117 miles—		
	Shelburne to New Germany	77·00	
	Indian Gardens to Liverpool	20·00	
	Sable River Junction to Lockport	20·00	
Ontario, Belmont and Northern—Leased to Central Ontario Ry.	From Junction with Central Ontario Ry. to Iron Mines in Township of Belmont	....	9·60

TABLE showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Orford Mountain	Eastman on C.P.R. to Lawrenceville and Kingsbury, Que		26·50
Ottawa and Gatineau, now Ottawa Northern and Western	Canadian Pacific Railway Junction in Hull, Que., to Gracefield		57·87
Ottawa Valley in Atlantic and Lake Superior System	Lachute on C.P.R., to St. Andrews on Ottawa River.		7·00
Ottawa and New York	From Ottawa to International Boundary near Cornwall		56·79
Pembroke Southern leased to Canada Atlantic	From Pembroke to Golden Lake		21·00
Philipsburg	Stanbridge Station of Canadian Pacific and Central Vermont Railways, to Philipsburg, Missisquoi Co.		7·50
Pontiac and Renfrew	From Wyman's Station, on Pontiac Pacific Junction Railway, to Bristol Iron Mines, County Pontiac, Que		4·25
Pontiac Pacific Junction	From Aylmer, Que., to Waltham		70·60
Portage and North-western	Portage la Prairie to Beaver	20·02	
	Portage la Prairie to Delta	15·05	35·07
Qu'Appelle, Long Lake and Saskatchewan	From Canadian Pacific Railway at Regina, Northwesterly to Long Lake and Prince Albert		253·96
Quebec Bridge and approaches to connect adjacent Railways	(Across St. Lawrence River at Quebec, under construction 10 miles.)		
Quebec and Lake St. John	Quebec to Roberval	191·00	
	Chambord Junction to Chicoutimi	51·00	242·00
Quebec Central	Main Line—Sherbrooke to Harlaka Junction, Intercolonial Railway, 5 miles from Lévis, Que	137·50	
	Chaudière Branch, Beauce Junction to St. Francis	15·00	
	Angus Branch—East Angus to Angus Mills	1·00	
	Tring Mégantic—Tring Junction to Mégantic	60·00	
	(Connects with Grand Trunk, Canadian Pacific and Boston and Maine Rys. at Sherbrooke).		213·50
Quebec, Montmorency and Charlevoix	Hedleyville, Parish of St. Roch, Quebec, to Cap Tourmente		30·00
Quebec Southern, comprising East Richelieu Valley and United Counties	Noyan Junction to St. Robert Junction		83·80
Red Mountain	From International boundary Line, B.C. to Rossland		9·53
Restigouche and Western	Campbellton, N.B., to St. Leonard's, 100 miles (under	const'n)	10·00
Rutland and Noyan	International Boundary to Noyan Jct.		5·00
Stanstead, Shefford and Chambly	From Junction with Montreal and Vermont Junction Railway, near St. John, Que., easterly to Waterloo		43·00
Shore Line (formerly Grand Southern)	St. John to St. Stephen, N.B		82·50
St. John Bridge and Railway Extension	From St. John to Fairville, crosses St. John River at the Falls by a cantilever steel bridge, and connects Intercolonial Railway with New Brunswick Railway, C.P.R., included in Canadian Pacific System		2·00
St. John Valley and Rivière du Loup	From Fredericton, N.B., to Woodstock, N.B., 66 miles, of which 6 miles are under construction		
Salisbury and Harvey (formerly Albert Railway)	Salisbury to Albert, N.B		45·00
St. Lawrence and Adirondack	From Jct. with Canada Atlantic near Valleyfield to International Boundary	19 80	
	Beauharnois to Junction with Canadian Pacific at Adirondack Junction	13·20	33·00
South Shore (formerly Montreal and Sorel)	From Junction with Grand Trunk at St. Lambert to St. François du Lac		61·50

TABLE showing Location of Railways, &c.—*Concluded.*

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Sydney and Louisbourg (Dominion Coal Co)	Sydney Harbour to Louisbourg Harbour	39·15	
	Branches to coal mines	9·81	
			48·96
St. Mary's River	Stirling to Spring Coulee (District of Alberta.)		30·00
Thousand Islands	Gananoque on St. Lawrence River to Gananoque Station, G.T.R		6·33
Témiscouata	Rivière du Loup, Que., on Intercolonial, to Edmundston, N.B., on the New Brunswick Railway	81·00	
	Branch—Edmundston to Connors, on St. John River	32·00	
			113·00
Tilsonburg, Lake Erie and Pacific	From Port Burwell on Lake Erie to Junction with Canada Southern Railway, north of Tilsonburg		20·00
Toronto, Hamilton and Buffalo, including Brantford, Waterloo and Lake Erie	Main Line—Waterford Jct. with Canada Southern to Welland Jct. with Canada Southern—passing through the city of Hamilton	79·87	
	Toronto Extension—Hamilton to Grand Trunk Jct.	1·77	
	Chantler to Fonthill	4·00	
	Belt Line City of Hamilton	3·52	
			89·16
Victoria and Sidney	City of Victoria to Sidney, Vancouver Island		16·26
York and Carleton	Junction with Canada Eastern Ry. at Cross Creek Station to Stanley, N.B		5·75

SUMMARY STATEMENT OF CAPITAL

FOR THE

FISCAL YEAR ENDED JUNE 30, 1901.

A. NOTE.—With regard to certain subsidies granted by Dominion Parliament.

By 60-61 Vic., cap. 4, 1897, 62-63 Vic., cap. 7, 63-64 Vic., cap. 8, 1900, and 1 Edward VII., cap. 7.—A subsidy was authorized on certain mileage of these railways specified in the said Acts of Parliament, of $3,200 per mile, and a further subsidy beyond the sum of $3,200 per mile, of fifty per cent on so much of the average cost of the said specified mileage subsidized as is in excess of $15,000 per mile, such subsidy not exceeding in the whole the sum of $6,400 per mile.

The amounts of certain of the subsidies authorized by Parliament which are given in this statement, include the determined portion of the subsidies, viz., the amounts produced by the $3,200 per mile, but the other portion, being an undetermined amount cannot be shown here.

Of the Railways shown in this statement the following is the mileage which may be entitled to the additional subsidies under these said Acts :—

Algoma Central	225	miles.
Canadian Pacific—Extension of Pipestone Branch	50	"
Central Railway of New Brunswick	45	"
Coast Railway of Nova Scotia now Halifax and Yarmouth	61	"
Cobourg, Northumberland and Pacific	50	"
Drummond County, now Intercolonial	$42\frac{1}{2}$	"
East Richelieu Valley, now in Quebec Southern	24	"
Great Northern	44	"
Gulf Shore	$5\frac{1}{2}$	"
Ontario and Rainy River, now in Can. Northern	80	"
Ottawa, Arnprior and Parry Sound	56	"
Ottawa and Gatineau, now Ottawa, Northern & Western	20	"
Ottawa and New York	53·87	"
Pembroke Southern	24	"
Philipsburg Railway and Quarry Co	$0\frac{66}{100}$	"
Pontiac Pacific Junction	$21\frac{1}{2}$	"
Restigouche and Western	110	"
St. Lawrence and Adirondack	$13\frac{1}{2}$	"
St. Stephen and Milltown	$1\frac{14}{100}$	"
Tilsonburg, Lake Erie and Pacific	$3\frac{1}{2}$	"
United Counties, now in Quebec Southern	1	"
Inverness and Richmond	98	"
Montreal and Province Line	19	"
Nova Scotia Southern	97	"
Ontario and Rainy River	80	"
York and Carleton	6	"
Atlantic and Lake Superior—Baie des Chaleurs	30	"
Central Ontario	20	"
Midland of Nova Scotia	58	"
Kingston and Pembroke	41	"

Note B.—Memorandum of adjustment with Statement No. 3, Part II, being Accountant of Department of Railways and Canals, Statement of Railway Subsidies to June 30, 1901.

——	$	cts.	$	cts.
Total Dominion Government aid paid up. Statement I			166,158,731	11
Add—Atlantic and North-west Railway (portion in United States)			1,386,000	00
St. Catherines and Niagara Railway (Electric Railway) in Electric Railway Statistics			38,400	00
Oshawa Railway and Niagara Company (Electric Railway) in Electric Railway Statistics			22,400	00
The above not included in Statement No. 1			167,605,531	11
Less—Intercolonial Railway, including Windsor Branch (cost)	63,973,971	47		
Prince Edward Island Railway (cost)	4,123,827	21		
Canadian Pacific Railway, construction of lines built by Dominion (not including surveys) and transferred to Canadian Pacific Company	31,112,213	45		
Fredericton and St. Mary's Bridge Company (loan)	300,000	00		
Grand Trunk Railway Company (loan)	15,142,633	33		
Kent Northern Railway (rails loan)	58,334	27		
Salisbury and Harvey Railway (loan including rails)	29,391	01		
St. John Bridge and Railway Extension (loan)	433,900	00		
Windsor and Annapolis Railway	1,193,369	00		
Canadian Pacific Railway Subsidy	25,000,000	00		
Western Counties	500,000	00		
			141,867,639	74
Agreeing with subsidy No. 3, Part II, accountant's statement to June 30, 1901			25,737,891	37

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STEAM RAILWAYS

SUMMARY STATEMENTS RELATING TO MILEAGE, ROLLING STOCK, CHARACTERISTICS OF ROADS, OPERATIONS, PASSENGERS AND FREIGHT CARRIED, EARNINGS, OPERATING EXPENSES AND ACCIDENTS.

No. 3.—Summary Statement of Characteristics of

Number.	Name of Railway.	Length of Line.				Length of Siding.	Weight per Yard.	
		Completed. (Rails laid.)	Under Construction.	Iron Rails.	Steel Rails.		Iron Rails.	Steel Rails.
		Miles.	Miles.	Miles.	Miles.	Miles.	Lbs.	Lbs.
1	Alberta Railway and Coal Co..... ..	64·62	....	......	64·62	13·21	....	35
2	*Albert Southern .... 16·00 Harvey Branch .... 3·00	19·00	....	......	19·00	....	... .	....
3	Algoma Central and Hudson Bay.....	42·00	49·50	......	42·00	18·00	....	85
4	Atlantic & Lake Superior, comprising— Baie des Chaleurs ....100·00 Great Eastern .... 23·00 Ottawa Valley . ... 7·00	130·00	23·00 82·00	....	130·00	4·00	....	56
5	Bay of Quinté, including . ... 4·00 Kingston, Napanee & Western 60·82	64·82	....	....	64·82	7·00	....	56, 60, 65
6	Bedlington and Nelson.......	15·20	....	......	15·20	·87	....	56
7	British Yukon	90·45	....	......	90·45	7·97	....	45
8	Brockville, Westport & Sault Ste. Marie	45·00	... .	......	45·00	2·00	....	56
9	Buctouche and Moncton.	32·00	....	....	32·00	2·50	....	54 & 56
10	†Calgary and Edmonton.....	295·93	....	....	295·93	9·81	....	56
11	Canada Atlantic, including Ottawa, Arnprior and Parry Sound	400·00	....	... .	400·00	93·00	......	56, 72, 73, 75....
	Leased lines— Central Counties	37·00	....	.. ..	37·00	6·00	.. . ..	56
	Pembroke Southern.	21·00	....	....	21·00	2·00	....	56
12	Canada Coals and Railway Co., formerly Joggins	12·00	....	......	12·00	3·00	....	56
13	Canada Eastern...	136·00	....	.. .	136·00	6·50	....	56 to 60
14	‡Canada Southern..................	382·19	....	......	382·19	176·62	.. ..	60, 80, 65
15	§Canadian Northern, comprising Lake Manitoba Ry. and Canal Co.'s Line, Winnipeg Great Northern Ry., Manitoba South Eastern Ry., Ontario and Rainy River Ry. and Port Arthur, Duluth and Western Ry.....	522·00	270·00	.....	522·00	67·02	....	56
16	Canadian Government Railways— Intercolonial, exclusive of Windsor Branch (32 miles), but including Drummond Co.............. ...	1,301·94	....	... .	1,301·94	210·85	....	56, 58, 67 & 80..
	Prince Edward Island.......... . .	209·00	....	28·00	181·00	16·40	38	50, 52, 56
17	††Canadian Pac. Ry.........4,554·20 Leased lines— Fredericton.......... ..... 22·10 New Brunswick............ 175·00 New Brunswick and Canada 117·20 St. John and Maine........ 92·10 St. John Bridge and Railway Extension.... ...... 2·00 ‖St. Stephen and Miltown.. 4·64 Tobique Valley .... 28·00 ¶Cap de la Madeleine..... 2·32 **Montreal and Lake Maskinongé ... ... 12·90 Atlantic and North-west .. 201·40 Montreal and Ottawa ..... 93·20 Ontario and Quebec.. ..... 474·50 St. Lawrence and Ottawa .. 58·40 Credit Valley....... ..... 175·70	7,292·31	....	....	7,292·31	907·80	.....	50 & 52 56, 60, 72 73, 80, 100

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* No return, reported unsafe and not in operation. † Operated by C.P.R. ‡ 132·50 miles double track. For mileage see Nos. 54 and 64. ‖ C.P.R. return 4·60 miles as operated. ¶ C.P.R. return 3·00 as houses.

Roads, &c., for the year ended June 30, 1901.

Number of Ties per Mile.	Nature of Rail Fastenings.	Number of Grain Elevators.	Number of Level Crossings.		Number of Overhead Bridges.	Height of Overhead Bridges above rail level.	Number of Public Roads under Crossings.	Number of Level Crossings of other Railways.	Number of Junctions with other Railways.	Number of Junctions with Branch Lines.	Radius of Sharpest Curve.	Number of Feet per Mile of heaviest gradient.	Gauge of Railway.	Number.
			Guarded.	Not guarded.										
						Feet.					Feet.		Ft.	
2640	Fishplates....	....	....	3	....	....	....	....	3	....	573	53	3·00	1
....	....	....	....	..... .	....	....	....	...	.....	...	... .	......	....	2
3000	Angle bars............... .	..	....	8	....	....	....	....	1	....	478	132	4·8½	3
2640	Angle and fishplates.........	....	....	61	4	22	.. .	....	4	....	717	67	4·8½	4
3000	Angle irons.......	. ..	....	50	...	....	1	1	4	....	955	90	4·8½	5
2640	Angle bars........	....	....	1	....	....	....	....	2	...	573	53	4·8½	6
2816	"	....	....	....	....	....	....	. ..	1	....	359	206	3·00	7
2640	Fisher's bridge joint	....	...	35	....	....	....	....	2	....	717	58	4·8½	8
2640	Fishplates........	....	....	12	....	....	....	1	1	....	816	74	4·8½	9
2640	Angle bars and fishplates. ..	10	....	167	....	....	....	....	3	....	1,146	53	4·8½	10
2816	" "	2	11	193	4	22	6	12	10	3	955	66	4·8½	11
2600	Fishplates.......	....	....	31	....	....	.	2	2	2	573	53	4·8½	
2640	"	....	....	14	. ..	....	1	....	1	....	955	79	4·8½	
3000	"	....	...	7	....	....	...	....	1	....	955	79	4·8½	12
2640	Fish and angle plates........	...	1	35	...	....	...	1	4	1	955	80	4·8½	13
2816 3168	Splice 4 and 6 bolts and crop end joints	....	8	418	19	21′ 6″	12	17	16	10	913	75	4·8½	14
2640	Angle bars and fishplates....	90	1	521	....	....	....	8	3	2	574	95	4·8¾	15
2640 2816	Angle fishplates..	2	22	482	30	18½ to 35	5	9	29	22	694	65	4·8½	16
2640	Fish and angle plates	....	....	964	2	17¼	....	....	....	..	396	90	3′ 6″	
2640 2992	Angle bars, fishplates and Bonzano joints	‡‡113	42	3,992	71	18′ 11″ 20′ 3″ 21′ 0″	73	50	69	72	214	238	4·8½	17

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§ Also leased lines: Northern Pacific and Manitoba, and Portage and Northwestern for month of June, 1901. operated. ** 1·90 miles of which is not in operation. †† Double track, 34·80 miles. ‡‡ Includes 48 ware-

No. 3.—Summary Statement of Characteristics of

Number.	Name of Railway.	Length of Line.				Length of Siding.	Weight per Yard.	
		Completed. (Rails laid.)	Under Construction.	Iron Rails.	Steel Rails.		Iron Rails.	Steel Rails.
		Miles.	Miles.	Miles.	Miles.	Miles.	Lbs.	Lbs.
	Can. Pac.—Leased lines—*Con.*							
	*Guelph Junction .... 15·25							
	Toronto, Grey and Bruce... 191·10							
	West Ontario Pacific...... 26·60							
	†Manitoba & North-western. 252·60							
	Manitoba South-western Colonization .... 214·40							
	Columbia and Kootenay.... 60·50							
	Nakusp and Slocan .... 36·30							
	Shuswap and Okanagan .. 50·80							
	Columbia and Western..... 157·90							
	Great North-west Central... 71·00							
	British Columbia Southern.. 202 20							
18	Caraquet	68 00	....	.....	68·00	3·25	....	50
19	Carillon and Grenville	13·00	....	13·00	....	·25	65	....
20	Central Ontario	125·00	......	....	125·00	13·00	....	42 & 56
	Ontario, Belmont & Northern	9·60	......	..	9·60	....	....	56
21	Central of New Brunswick	45·66	....	.....	45·66	2·00	....	52 to 56
22	Central Ry. of Nova Scotia, formerly Nova Scotia Central	74·00	......	.....	74·00	3·50	....	56
23	Cobourg, Northumberland and Pacific	....	49 00	....	....	......	....	....
24	Cumberland Ry. and Coal Co.	32·00	14 00	....	32·00	16·00	......	56 to6
25	Dominion Atlantic, comprising—	220·50	....	.....	220·50	20·50	....	56,60,67,72
	Windsor and Annapolis...... 87·50							
	Cornwallis Valley.......... 14·00							
	Yarmouth and Annapolis (Western Counties).. .. 87·00							
	Windsor Branch of Intercolonial .... 32·00							
26	Elgin and Havelock	28·00	....	......	28·00	2·00	....	46 & 56
27	Esquimalt and Nanaimo	78·00	......	......	78·00	3·92	......	54, 56, 60
28	Fredericton and St. Mary's Ry. Bridge.	1·33	....	1·33	....	......	56	....
29	‡Grand Trunk. ....880.35 Wharf Br., Montreal. 3·44 } 883·79	3,153·98	....	.. ..	3,153·98	758·12	....	50 to 100
	Great Western .... 561·80							
	Brantford, Norfolk and Port Burwell .... 34·39							
	Buffalo and Lake Huron.... 162·00							
	Grand Trunk, Georgian Bay and Lake Erie.. ...... 171·00							
	Owen Sound Branch ...... 12·42							
	London, Huron and Bruce.. 68·00							
	Waterloo Junction........ 10·25							
	South Norfolk .... 17·00							
	Wellington, Grey and Bruce. 168·13							
	Northern .... 172·10							
	North Simcoe............. 33·00							
	Hamilton & North-western. 172·00							
	Northern Pacific Junction.. 111·37							
	Toronto Belt Line .... 12·79							
	Midland .... 166·00							

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*C.P.R. return 15·00 miles as operated.

† Including Saskatchewan and Western Branch.

Roads, &c., for the year ended June 30, 1901—*Continued.*

Number of Ties per Mile.	Nature of Rail Fastenings.	Number of Grain Elevators.	Number of Level Crossings.		Number of Overhead Bridges.	Height of Overhead Bridges above rail level.	Number of Public Roads under Crossings.	Number of Level Crossings of other Railways.	Number of Junctions with other Railways.	Number of Junctions with Branch Lines.	Radius of Sharpest Curve.	Number of Feet per Mile of heaviest gradient.	Gauge of Railway.	Number.
			Guarded.	Not guarded.										
						Ft.					Ft.		Ft.	
2600	Fishplates	....	....	12	....	....	....	. ..	1	1	1,000	60	4·8½	18
1760	Chairs	...	1	8	1	16	....	1	....	....	1,910	100	5·6	19
2640	Fishplates and angle bars	....	....	105	1	20·	....	2	5	1	955	105	4·8½	20
2300	Fishplates	....	....	8	....	....	....	....	1	...	717	72	4·8½	
2640	"	...	....	21	2	15·0	....	....	1	...	816	74	4·8½	21
2640	Angle bars	....	....	32	1	20	....	....	1	...	819	80	4·8½	22
....	....	....	....	....	....	....	....	....	....	....	...	....	....	23
2600	Fishplates.	....	....	17	....	....	....	....	....	....	820	160	4·8½	24
2640	Fishplates.	....	1	109	4	22·0	....	...	3	2	637	79	4·8½	25
2640	"	...	....	25	....	......	. ..	1	1	....	1,910	90	4·8½	26
2992	Angle fishplates and bolts	...	...	17	1	23	3	1	2	....	573	80	4·8½	27
2564	Angle fishplates	...	....	6	....	....	...	....	2	....	1,433	50	4·8½	28
3200	Angle bars and fishplates.	10	91	2,950	240	15′9½″ to 40′ 0″	134	53	56	70	717	106	4·8½	29

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‡ 456 miles double track.

No. 3.—SUMMARY STATEMENT of Characteristics of

Number.	Name of Railway.	Length of Line.				Length of Siding.	Weight per Yard.	
		Completed. (Rails laid.)	Under Construction.	Iron Rails.	Steel Rails.		Iron Rails.	Steel Rails.
		Miles.	Miles.	Miles.	Miles.	Miles.	Lbs.	Lbs.
	Grand Trunk—*Con.*							
	Grand Junction .... 85·21							
	Toronto and Nipissing ...... 85·00							
	Lake Simcoe Junction ...... 26·00							
	Victoria .... 53·00							
	Whitby, Port Perry and Lindsay .... 46·00							
	*Cobourg, Blairton and Marmora .... 15·00							
	Jacques Cartier Union ...... 6·50							
	Montreal and Champlain Junction .... 61·73							
	Beauharnois Junction ...... 19·50							
30	Gulf Shore	16·78	......	....	16·78	1·01	....	56
31	Halifax and Yarmouth	50·10	61·00	......	50·10	2·83	....	56
32	Hampton and St. Martin's	29·00	......	......	29·00	·50	....	56
33	†Hereford	53·30	......	...	53·30	8·32	....	56
34	Irondale, Bancroft and Ottawa	48·00	......	....	48·00	2·50	....	56
35	Interprovincial Bridge and Approaches.	1·30	......	......	1·30	......	....	75
36	Inverness and Richmond	56·50	4·50	......	56·50	3·00	....	56
37	Kaslo and Slocan, B.C	31·80	......	....	31·80	1·25	....	45
38	Kent Northern, including St. Louis and Richibucto	34·00	....	..	34·00	2·00	....	56
39	Kingston and Pembroke	112·85	....	9·75	103·10	21·00	50 to 84	56
40	L'Assomption	3·33	......	...	3·33	·33	....	56
41	Lake Erie and Detroit River, including Erie and Huron	155·72	....	......	155·72	34·35	....	51 to 70
	Leased lines—London & Port Stanley.	24·00	....	...	24·00	2.47	....	76
42	Lenora Mount Sicker	6·25	....	.....	6·25	·12	....	20 & 28
43	Lotbinière and Mégantic	30·34	......	.....	30·34	6·35	....	56
44	Manitoulin and North Shore	15·50	....	.....	15·50	0·50	....	65
45	Massawippi Valley	35·46	....	....	35·46	6·24	....	60
46	‡Midland of Nova Scotia	......	57·50	....	......	2·00	....	60
47	Montfort and Gatineau Colonization	33·00	......	..	33·00	·42	....	56
48	Montreal & Atlantic, formerly South-eastern .... 139·30 Lake Champlain & St. Lawrence Junction .... 60·70	200·00	......	.....	200·00	21·60	....	56,60,72,73
49	Montreal and Province Line, formerly Montreal, Portland and Boston	40·60	....	8·60	32·00	1·00	38	56
50	Montreal and Vermont Junction	23·60	......	....	23·60	2·00	....	60 & 72
51	New Westminster Southern	24·10	....	.....	24·10	3·46	....	56
52	Nelson and Fort Sheppard	54·70	......	.....	54·70	3·44	....	56
53	New Brunswick & Prince Edward Island	36·00	....	.....	36·00	1·50	....	56
54	§Northern Pacific and Manitoba	320·51	....	.....	320·51	43·56	....	56
55	Nosbonsing and Nipissing	5·50	......	....	5·50	1·25	....	56
56	Nova Scotia Southern	......	117·00	......	......	......	....	56 & 70
57	Nova Scotia Steel Co.'s Line	12·50	......	....	12·50	3·87	....	56
58	Orford Mountain	26·50	......	.....	26·50	1·00	....	56
59	Ottawa and Gatineau, now Ottawa, Northern and Western	57·87	......	....	57·87	4·00	....	56 & 70
60	Ottawa and New York	56·79	....	....	56·79	3·24	....	65

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* Not in operation. † Including Dominion Lime Co.'s line. ‡ Line under construction and leased to the Province of Manitoba. ¶ These Elevators being on line leased to Canadian Northern are

Roads, &c., for the Year ended June 30, 1901—*Continued.*

Number of Ties per Mile.	Nature of Rail Fastenings.	Number of Grain Elevators.	Number of Level Crossings.		Number of Overhead Bridges.	Height of Overhead Bridges above rail level.	Number of Public Roads under Crossings.	Number of Level Crossings of other Railways.	Number of Junctions with other Railways.	Number of Junctions with Branch Lines.	Radius of Sharpest Curve.	Number of Feet per Mile of heaviest gradient.	Gauge of Railway.	Number.
			Guarded.	Not guarded.										
						Ft.					Ft.		Ft.	
2600	Fishplates..........	....	....	19	...	....	..	....	1	...	574	53	4·8½	30
2640	Angle bars..........	....	....	31	...	....	....	....	1	....	955	79	4·8½	31
2640	Fishplates..........	....	....	18	....	....	..	....	1	..	955	90	4·8½	32
2800	"	....	....	28	....	....	...	2	3	...	955	66	4·8½	33
2640	Flat fishplates..........	....	....	16	....	....	..	....	1	....	1,000	60	4·8½	34
2640	Angle bars	....	....	....	2	21·6	9	....	1	....	574	53	4·8½	35
2821	"	....	....	22	....	....	....	....	1	...	698	78	4·8½	36
2640	Angle bars and bolts..........	....	....	13	1	22·6	2	...	....	1	193	172	3·00	37
2432	Fishplates and bolts..........	....	...	10	....	....	...	....	1	1	1,000	60	4·8½	38
2640	Plain and angle fishplates...	....	....	56	3	16&21′6″	1	6	6	13	955	79	4·8½	39
2500	Fishplates..........	....	....	1	....	.....	....	....	1	...	955	20	4·8½	40
2800	Angle bars..........	1	3	221	5	20&21′6″	..	10	10	...	637	60	4·8½	41
2800	Fishplates	....	1	30	4	20·0	2	2	....	....	....	53	4·8½	
3168	Fishplates and bolts..........	....	....	2	....	....	....	....	....	....	76	501	3·00	42
2640	Fish and angle plates..........	....	....	10	....	....	..	1	2	...	717	80	4·8½	43
3000	Angle bars..........	....	....	....	....	....	....	...	2	....	717	65	4·8½	44
2800	Fishplates..........	..	1	28	1	19·	....	1	2	1	441	76	4·8½	45
2600	Angle bars and bolts..........	....	....	27	....	....	....	1	2	..	882	55	4·8½	46
2600	Plain fishplates..........	..	....	20	1	22·	....	...	1	....	573	158	4·8½	47
2640	Fishplates and angle bars....	....	....	164	1	19·6	2	6	6	2	441	140	4 8½	48
3000	Fishplates and chairs..........	....	....	21	....	.....	...	3	1	2	1,433	....	4·8½	49
3000	Fishplates and bolts..........	....	....	51	....	....	....	....	3	...	2,865	52	4·8½	50
2640	Angle bars..........	....	....	26	....	....	....	....	....	....	717	89	4·8½	51
2640	"	....	....	5	....	....	....	....	2	....	478	132	4·8½	52
2400	Fishplates..........	....	....	26	....	....	....	....	1	....	750	66	4·8½	53
2640	Angle bars and bolts..........	¶(73)	1	278	....	....	...	5	2	4	574	63	4·8½	54
3000	Fishplates..........	..	....	2	....	....	...	1	1	....	955	132	4·8½	55
2640	Angle bars and bolts..........	....	....	....	....	....	...	1	....	....	717	80	4·8½	56
2640	" "	....	...	5	....	....	....	....	1	1	955	79	4·8½	57
2640	Fishplates..........	....	...	17	....	....	....	....	1	....	955	74	4·8½	58
2640	Plain and angle bars..........	....	....	50	1	21·6	9	....	1	....	573	106	4·8½	59
2750	40-lb. angle bar with 6⅞″ bolt..	....	....	70	1	22·	....	3	3	....	2,865	40	4·8½	60

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steel rails laid 57·5 miles.
included in that Ry.

§ For 11 months only to May 31, 1901, at which date this property was

No. 3.—SUMMARY STATEMENT of Characteristics of

Number.	Name of Railway.	Length of Line.				Length of Siding.	Weight per Yard.	
		Completed. (Rails laid.)	Under Construction.	Iron Rails.	Steel Rails.		Iron Rails.	Steel Rails.
		Miles.	Miles.	Miles.	Miles.	Miles.	Lbs.	Lbs.
61	Philipsburg Ry. and Quarry Co.'s Line.	7·50	....	.....	7·50	......	......	56
62	*Pontiac and Renfrew...............	4·25	......	...	4·25	0·75	......	56
63	Pontiac Pacific Junction	70·60	8·50	....	70·60	3·50	......	56
64	†Portage and North-western	35·07	....	.....	35·07	2·59	....	56
65	Qu'Appelle, Long Lake & Saskatchewan	253·96	....	....	253·96	7·75	....	56
66	Quebec Bridge Co........	....	10·00	.....	....	....	....	....
67	Quebec Central.........	213·50	.. ..	.....	213·50	20·50	....	56 to 70
68	Quebec and Lake St. John.	242·00	.... ..	.....	242·00	22·50	....	56 & 70
	‡Great Northern...... ..... 20·00 } Lower Laurentian..... .... 35·00 }	....	....	.....	....	....	....	....
69	Great Northern Ry. of Canada, including Lower Laurentian	175·10	....	.. ..	175·10	11·59	....	56 & 70
70	**Quebec, Montmorency and Charlevoix (now Quebec Ry., Light and Power Co.).....................	30·00	....	.....	30·00	4·00	....	56 & 70
71	Quebec Southern....................	83·80	....	....	83·80	6·00	....	56
72	Red Mountain................	9·53	....	....	9·53	3·34	....	56
73	*Restigouche and Western	10·00	100·00	.... ..	10·00	·76	....	56
74	Rutland and Noyan................	5·00	....	.....	5·00	0·20	....	60
75	Salisbury and Harvey.	45·00	....	37·00	8·00	6·00	56	56
76	Shore Line, New Brunswick...........	82.50	....	.. ..	82·50	2·50	.... ..	50
77	Stanstead, Shefford and Chambly......	43·00	....	12·00	31·00	2·00	60	60
78	‖St. Clair Tunnel, Yard and Approaches..	2·23	... .	....	2·23	11·00	....	100
79	St. John Valley and Rivière du Loup..	.... ..	6·00	.....	....	....	....	....
80	St. Lawrence and Adirondack.........	33·00	....	.....	33·00	6·83	....	72 to 80
81	St. Mary's River	30·00	....	.....	30·00	....	....	28
82	Sydney & Louisburg (Dom. Coal Co.)..	48·96	....	.....	48·96	4·00	. .....	56 & 80
83	South Shore, formerly Montreal & Sorel	61·50	....	.. .	61·50	3·00	....	56
84	Témiscouata........	113·00	....	....	113·00	3·00	....	56
85	Tilsonburg, Lake Erie and Pacific.	20·00	....	.....	20·00	2·50	....	56 & 65
86	Thousand Islands....	6·33	....	....	6·33	1·00	....	56 & 65
87	§Toronto, Hamilton and Buffalo.......	89·16	....	.....	89·16	20·81	....	56 to 80
88	¶United Counties................. } East Richelieu Valley.. ... . }	....	....	.....	....	....	....	....
89	Victoria and Sidney, B.C............	16·26	....	...	16·26	1·20	....	5)
90	York and Carleton.	5·75	....	.... .	5·75	·10	....	56
	Total..................	18,294·43	852·00	109·68	18,184·75	2,709·60	....	....

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*Not in operation. †For 11 months only to May 31, 1901, at which date this property was leased to the 1900. For balance of year see Great Northern Ry. of Canada. ‖6,000 feet in length, 19 feet 10 inches inside †† Includes 5 warehouses.

Roads, &c., for the year ended June 30, 1910—*Concluded.*

Number of Ties per Mile.	Nature of Rail Fastenings.	Number of Grain Elevators.	Number of Level Crossings.		Number of Overhead Bridges.	Height of Overhead Bridges above rail level.	Number of Public Roads under Crossings.	Number of Level Crossings of other Railways.	Number of Junctions with other Railways.	Number of Junctions with Branch Lines.	Radius of Sharpest Curve.	Number of Feet per Mile of heaviest gradient.	Gauge of Railway.	Number.
			Guarded.	Not guarded.										
						Feet.					Ft.		Ft.	
2816	Fishplates	....	....	7	...	...	..	....	1	1	955	52	4·8½	61
2640	"	....	....	....	....	....	....	....	1	....	717	106	4·8½	62
2640	Fish and angle plates	††10	....	52	....	....	....	...	1	....	1,146	53	4·8½	63
2640	Angle bars and bolts	1	....	29	....	....	...	2	1	1	2,262	15	4·8½	64
2640	Angle bars and fishplates	8	....	53	....	....	....	....	1	1	1,146	65	4·8½	65
....	....	....	....	....	....	....	....	....	....	....	....	....	....	66
2640	Fish and angle plates	....	....	115	...	....	3	2	7	2	882	76	4·8½	67
2640	Fishplates and angle bars	1	2	56	....	....	3	....	2	2	717	105	4·8½	68
....	....	....	....	....	....	....	....	....	....	....	....	....	....	
2640	Fishplates and angle bars	2	....	88	1	16·0	.. .	5	5	....	2,292	104	4·8½	69
2640	Plain and angle fishplates	...	1	10	....	....	..	...	2	...	1,433	42	4.8½	70
2640	Fishplates	....	....	53	....	....	....	5	5	....	717	40	4·8½	71
2640	Angle bars	....	...	....	....	....	....	....	...	....	287	184	4·8½	72
2600	Fishplates	....	....	7	....	....	....	....	1	...	574	79	4·8½	73
2640	Angle bars	....	....	2	...	....	...	1	2	....	637	26	4·8½	74
2600	Fishplates and sleeves	....	....	27	1	15·0	....	....	1	....	717	80	4·8½	75
2992	Fishplates	....	....	15	5	23·0	....	3	3	....	574	85	4·8½	76
2640	Fishplates and chairs.	....	....	42	1	18·0	....	3	4	....	1,910	60	4·8½	77
....	....	....	....	....	....	....	....	....	....	..	.....	105	4·8½	78
....	....	....	....	....	....	....	....	....	....	....	....	....	....	79
3000	36" angle bars, 6 bolts	....	....	31	1	20·6	2	2	4	...	1,146	57	4·8½	80
2113	Fishplates	....	..	6	....	....	....	.	1	....	382	79	3·00	81
3000	Angle bars, 4 and 6 bolts	....	....	26	2	18·0	4	2	2	7	1,433	70	4·8½	82
2640	Fishplates	....	....	32	...	....	....	....	4	....	1,910	28	4·8½	83
2640	"	....	....	38	....	....	2	1	2	1	819	79	4·8½	84
2640	Angle bars	3	....	19	1	21·	3	1	2	1	955	52	4·8½	85
3000	"	....	....	8	....	....	....	....	1	...	410	84	4·8½	86
3000	4 bolt angle bars	....	6	122	15	22·	2	5	6	3	675	79	4·8½	87
....	....	....	....	....	....	....	....	....	....	....	....	....	....	88
....	....	....	....	....	....	....	....	....	....	....	....	....	....	
2464	8" plain fishplates	....	...	13	....	....	1	....	...	..	637	105	4·8½	89
2600	Fishplates	...	....	....	....	....	....	....	1	....	675	64	4·8½	90
		253	193	12,422	427	....	280	233	347	230	....	....	...	

Province of Manitoba. ‡ Included in Quebec and Lake St. John for 4 months only, up to October, 31 diameter. § 4·69 miles of double track. ¶ Now Quebec Southern, see No. 71. ** Double track 6 miles

No. 4.—Summary Statement of the Operations of the

Number.	Name of Railway.	Mileage.	Train Mileage.			
			Passenger Trains.	Freight Trains.	Mixed Trains.	Total Train Mileage.
1	Alberta Railway and Coal Co.	64·62	22,092	44,448	3,888	70,428
2	Albert Southern Harvey Branch	......	......	......	......	......
3	Algoma Central and Hudson Bay	42·00	825	5,344	24,236	30,406
4	Atlantic and Lake Superior, comprising— Baie des Chaleurs 98·00 Great Eastern, 23 miles not under traffic Ottawa Valley, 7 miles not under traffic	98 00	60,000	5,000	......	65,000
5	Bay of Quinté Railway and Navigation Co. 4·00 Kingston, Napanee & Western 60·82	64·82	......	......	134,041	134,041
6	Bedlington and Nelson	15·20	7,941	10,271	......	18,212
7	British Yukon	90·45	17,349	31,631	44,359	93,339
8	Brockville, Westport & Sault Ste. Marie.	45·00	1,452	4,024	28,010	33,486
9	Buctouche and Moncton	32·00	......	......	18,432	18,432
10	Calgary and Edmonton	295·93	......	93,347	126,183	219,530
11	Canada Atlantic, including Ottawa, Arnprior and Parry Sound 400·00 Leased—Central Counties 37·00 Pembroke Southern 21·00	458·00	507,09	853,554	172,413	1,533,065
12	Canada Coals & Ry. Co., formerly Joggins	12·00	......	......	35,265	35,265
13	Canada Eastern	136·00	90,720	77,430	25,290	193,440
14	Canada Southern	382·19	1,243,641	2,579,621	139,801	3,963,063
15	Canadian Northern, comprising Lake Manitoba Railway and Canal Co.'s line, Winnipeg Great Northern, Manitoba South Eastern, Ontario and Rainy River, Port Arthur, Duluth and Western.	522·00	12,660	10,831	187,167	210,658
16	Canadian Government Railways—					
	Intercolonial	1,301·94	1,954,489	......	4,308,185	6,262,674
	Prince Edward Island	209·00	92,941	......	177,314	270,25
17	Canadian Pacific Railway, owned 4,554·20 Leased lines— Fredericton 22·10 New Brunswick 175·00 New Brunswick & Canada 117·20 St. John and Maine 92·10 St. John Bridge and Ry. Extension 2·00 St. Stephen and Milltown 4·60 Tobique Valley 28·00 Cap de la Madeleine 3·00 Montreal and Lake Maskinongé 11·00 Atlantic and North-west 201·40 Montreal and Ottawa 93·20 Ontario and Quebec 474·50 St. Lawrence and Ottawa 58·40 Credit Valley 175·70 Guelph Junction 15·00 Toronto, Grey and Bruce 191·10 West Ontario Pacific 26·60 Manitoba and North-western 252·60	7,290·80	7,042,667	8,986,878	1,641,169	17,670,714

Year and Mileage, for the Year ended June 30, 1901.

Engine Mileage.	Total Number of Passengers Carried.	Tons of Freight of 2,000 lbs. Handled.	Average Rate of Speed of Passenger Trains—Miles per Hour.	Average Rate of Speed of Freight Trains—Miles per Hour.	Number.	Remarks.
71,690	4,203	69,881	18	14	1	
....	....	....	....	....	2	No return, not in operation.
30,405	15,267	202,366	20	15	3	
65,000	11,522	20,014	25	20	4	
134,041	71,736	282,241	....	....	5	
18,212	5,401	31,293	20	15	6	Running powers on C.P.R. from Creston Junction to Sirdar Junction, 8·70 miles.
95,616	18,033	38,208	15	15	7	
33,756	35,281	14,270	26	16	8	
19,072	9,443	20,615	16	....	9	
244,823	43,914	98,204	25	13	10	Operated by C.P.R.
1,956,094	339,640	1,592,987	30	15	11	
38,650	8,216	68,227	20	15	12	
199,600	45,270	138,411	30	18	13	
5,278,819	611,718	4,722,276	46	14	14	
253,680	49,533	220,894	28	14	15	Also leased lines, Northern Pacific and Manitoba, and Portage and Northwestern for month of June, 1901; for mileage see Nos. 50 and 58. Running powers over the Manitoba and Northwestern Ry., 36 miles from Portage la Prairie to Gladstone Junction.
7,909,297	2,025,295	2,111,310	25	15	16	Running powers over Grand Trunk— Point Lévis to Hadlow............. 1·50 Chaudière Curve to Chaudière...... 1·18 Ste. Rosalie Junction to Montreal... 37·62 40·30
344,144	157,793	73,696	22	16		
23,924,917	4,309,536	7,145,276	30	18	17	Also running powers on— Grand Trunk Ry., Toronto to Hamilton Junction.................. 36·20 Toronto, Hamilton and Buffalo Ry., Hamilton Junction to Hamilton. . 2·70 Canada Atlantic Ry., Montreal and Ottawa Junction to Ottawa....... ·80 39·70

No. 4.—SUMMARY STATEMENT of the Operations of the Year

Number.	Name of Railway.	Mileage.	Train Mileage.			
			Passenger Trains.	Freight Trains.	Mixed Trains.	Total Train Mileage.
	Can. Pac.—Leased lines—*Con.*—					
	Manitoba South-western Colonization 214·40					
	Columbia and Kootenay 60·50					
	Nakusp and Slocan 36·30					
	Shuswap and Okanagan 50·80					
	Columbia and Western 157·90					
	Great Northwest Central 71·00					
	British Columbia Southern 202·20					
18	Caraquet	68·00			47,000	47,000
19	Carillon and Grenville	13·00	6,000	500		6,500
20	Central Ontario 125·00	134·00	16,300	10,400	96,300	123,000
	Ontario, Belmont and Northern 9·60					
21	Central of New Brunswick	45·66			9,500	9,500
22	Central of Nova Scotia (formerly Nova Scotia Central	74·00			49,358	49,358
23	Cumberland Railway and Coal Co.'s line.	32·00			75,133	75,133
24	Dominion Atlantic, comprising—					
	Windsor and Annapolis 87·50	220·50	218,307		302,065	520,372
	Cornwallis Valley 14·00					
	Yarmouth and Annapolis 87·00					
	Windsor Branch, Intercolonial 32·00					
25	Elgin and Havelock	28·00			14,472	14,472
26	Esquimalt and Nanaimo	78·00	118,010	78,825		196,835
27	Fredericton and St. Mary's Ry. Bridge	1·33				
28	Grand Trunk 880·35 } 883·79	3,138·98	5,824,058	9,649,082	1,015,221	16,488,361
	Wharf Branch, Montreal 3·44					
	Great Western 561·80					
	Brantford, Norfolk and Port Burwell 34·39					
	Buffalo and Lake Huron 162·00					
	Grand Trunk, Georgian Bay and Lake Erie 171·00					
	Owen Sound Branch 12·42					
	London, Huron and Bruce 68·00					
	Waterloo Junction 10·25					
	South Norfolk 17·00					
	Wellington, Grey and Bruce 168·13					
	Northern 172·10					
	North Simcoe 33·00					
	Hamilton and North-western 172·00					
	Northern Pacific Junction 111·37					
	Toronto Belt Line 12·79					
	Midland 166·00					
	Grand Junction 85·21					
	Toronto and Nipissing 85·00					
	Lake Simcoe Junction 26·00					
	Victoria 53·00					
	Whitby, Port Perry & Lindsay 46·00					
	Jacques Cartier Union 6·50					
	Montreal & Champlain Junction 61·73					
	Beauharnois Junction 19·50					
29	Gulf Shore	16·78			3,210	3,210
30	Halifax and Yarmouth (formerly Coast Line of Nova Scotia)	30·80	2,705		43,483	46,188
31	Hampton and St. Martins	29·00			19,000	19,000
32	Hereford	53·30	11,770	53,495		65,265
33	Inverness and Richmond	56·50				
34	Irondale, Bancroft and Ottawa	48·00	386		30,048	30,434
35	Kaslo and Slocan	31·80	2,359		22,624	24,983

and Mileage, for the Year ended June 30, 1901—*Continued.*

Engine Mileage.	Total Number of Passengers Carried.	Tons of Freight of 2,000 lbs. Handled.	Average Rate of Speed of Passenger Trains—Miles per Hour.	Average Rate of Speed of Freight Trains—Miles per Hour.	Number.	Remarks.
47,000	5,610	18,904	15	15	18	
7,000	5,600	172	25	20	19	
869,954	78,718	195,229	25	20	20	
23,890	946	4,510	15	15	21	
54,553	46,022	33,824	20	20	22	Running powers on Dominion Atlantic from Middleton Junction to Middleton 0·33 miles.
139,762	23,934	438,006	20	20	23	
520,372	273,639	221,613	30	15	24	Running powers over I.C.R., Halifax to Windsor Junction, 14 miles.
14,472	4,090	7,622	15	....	25	
196,835	130,562	158,595	27	20	26	
....	*14,447	....	....	....	27	Running powers on Canada Eastern, 0·17 miles. *Included in the Canada Eastern Ry., which company run their trains across this bridge paying tolls.
19,968,153	6,548,098	9,753,557	34	18	28	
3,210	585	4,563	15	15	29	
50,824	70,362	7,903	24	....	30	Also 19·3 miles not in operation but was in operation last year.
19,000	5,796	18,790	15	15	31	
87,937	17,642	88,203	26	15	32	
....	....	....	....	....	33	Road not opened for traffic until June 15, 1901, and no separate returns for the 15 days in June are available.
31,434	7,625	19,589	18	....	34	
34,617	14,853	18,597	12	12	35	

No. 4.—SUMMARY STATEMENT of the Operations of the Year

Number.	Name of Railway.	Mileage.	Train Mileage.			
			Passenger Trains.	Freight Trains.	Mixed Trains.	Total Train Mileage.
36	Kent Northern, including St. Louis and Richibuctou	34·00	....	....	18,000	18,000
37	Kingston and Pembroke	112·85	65,104	8,138	61,974	135,216
38	L'Assomption	3·33	....	....	6,146	6,146
39	Lake Erie and Detroit River, including Erie and Huron and leased lines ....155·72 London and Port Stanley ..... 24·00	179·72	260,815	7,480	111,488	379,783
40	Lenora Mount Sicker	6·25	....	5,040	....	5,040
41	Lotbinière and Mégantic	30·34	....	....	17,505	17,505
42	Massawippi Valley	35·46	73,531	61,111	18,867	153,509
43	Montfort and Gatineau Colonization	33·00	21,034	31,204	....	52,238
44	Montreal and Atlantic, formerly South-eastern ....102·70 Lake Champlain and St. Lawrence Junction..... 60·70	163·40	89,281	178,394	99,996	367,671
45	Montreal and Province Line	40·60	39,703	1,850	35,173	76,726
46	Montreal and Vermont Junction	23·60	79,138	106,159	2,016	187,313
47	New Westminster Southern	24·10	2,826	48	14,832	17,706
48	Nelson and Fort Sheppard	54·70	24,945	25,374	....	50,319
49	New Brunswick & Prince Edward Island	36·00	2,288	15,680	21,792	39,760
50	Northern Pacific and Manitoba	320·51	108,450	76,296	52,263	237,009
51	Nosbonsing and Nipissing	5·50	....	8,950	....	8,950
52	Nova Scotia Steel Co.'s Ry	12·50	....	....	15,000	15,000
53	Orford Mountain	26·50	17,528	1,140	8,920	27,588
54	Ottawa, Northern and Western	57·87	20,426	2,380	40,310	63,116
55	Ottawa and New York	56·79	77,484	20,591	15,138	113,213
56	Philipsburg Railway and Quarry Co.	7·50	240	1,056	....	1,296
57	Pontiac Pacific Junction	70·60	1,750	420	44,380	46,550
58	Portage and North-western	35·07	4,398	35	5,024	9,457
59	Qu'Appelle, Long Lake & Saskatchewan	253·96	....	....	66,968	66,968
60	Quebec Central	213·50	145,421	111,085	302,969	559,475
61	Quebec and Lake St. John	242·00	143,919	125,376	63,112	332,407
	Great Northern, St. Tite to St. Boniface ..... 20·00 Lower Laurentian, Rivière à Pierre to St. Tite..... 35·00	....	....	....	....	....
62	Great Northern Ry. of Canada, including Lower Laurentian (8 months only ending June 30, 1901, previous 4 months included in Quebec and Lake St. John)	175·10	73,111	42,576	61,001	176,688
63	Quebec, Montmorency and Charlevoix	30·00	111,456	....	51,954	163,410
64	Quebec Southern	83·80	55,805	10,733	55,088	121,626
65	Red Mountain	9·53	8,862	13,186	....	22,048
66	Rutland and Noyan	5·00	....	....	....	....
67	Salisbury and Harvey	45·00	....	....	24,917	24,917
68	Shore Line, New Brunswick	82·50	....	....	61,084	61,084
69	Stanstead, Shefford and Chambly	43 00	44,565	12,449	26,638	83,652
70	St. Clair Tunnel	2 23	....	....	....	....
71	St. Lawrence and Adirondack	33·00	120,225	19,882	51,467	191,574
72	St. Mary's River	30·00	455	9,225	4,775	14,455
73	Sydney and Louisburg, Dom. Coal Co.'s line	48·96	53,520	370,663	....	424,183
74	South Shore, formerly Montreal & Sorel	61·50	40,878	....	38,310	79,188
75	Témiscouata	113·00	452	....	85,276	85,728

and Mileage, for the Year ended June 30, 1901—*Continued.*

Engine Mileage.	Total Number of Passengers Carried.	Tons of Freight of 2,000 lbs. Handled.	Average Rate of Speed of Passenger Trains—Miles per Hour.	Average Rate of Speed of Freight Trains—Miles per Hour.	Number.	Remarks.
18,000	5,795	4,070	18	......	36	
135,216	37,170	105,248	25	18	37	
6,146	5,756	446	15	15	38	
649,800	499,288	520,286	33	22	39	
5,040	....	7,775	....	6	40	
19,262	7,034	28,148	....	....	41	
216,613	104,877	279,761	25	12	42	Also running powers on Grand Trunk from Lennoxville to Sherbrooke, 2·95 miles.
52,238	8,200	27,185	15	12	43	
570,324	175,428	733,919	30	18	44	Also 36·6 miles from Sorel to Drummondville not in operation.
76,726	86,388	48,080	30	12	45	
187,313	115,825	945,386	40	15	46	
13,706	6,964	8,652	....	....	47	
50,319	17,309	24,285	20	12	48	Running powers on C. P. R. from Five Mile Point to Nelson, 4·70 miles.
44,394	15,046	47,076	20	15	49	
309,203	98,991	158,154	28	14	50	For eleven months only to May 31, 1901, at which date this property was leased to the Province of Manitoba.
9,670	....	190,300	....	20	51	
33,500	5,729	160,306	15	15	52	
27,588	5,109	20,443	28	16	53	
63,691	67,534	33,234	30	20	54	
113,213	72,608	39,076	35	18	55	
1,296	200	4,185	25	15	56	
46,900	32,987	23,656	30	20	57	
40,357	2,118	11,315	28	14	58	For eleven months only to May 31, 1901, at which date this property was leased to the Province of Manitoba.
95,736	9,440	32,894	18	13	59	
570,519	178,969	370,010	25	15	60	Running powers on Intercolonial Ry., Harlaka Junction to Lévis, 5 miles.
497,291	238,727	341,690	26	16	61	
....	....	....	....	....	..	Included in Quebec and Lake St. John for 4 months only up to Oct. 31, 1900, for balance of year see Great Northern Railway of Canada.
254,401	65,379	185,697	25	15	62	Running powers on Quebec and Lake St. John. from Quebec to Rivière à Pierre, 58 miles.
56,223	537,933	24,493	21	21	63	
121,919	36,447	134,515	30	16	64	Running powers on South Shore; St. Robert Junction to Sorel, 6·00 miles.
41,848	11,901	275,881	12	10	65	
....	....	....	....	....	66	Operated by Rutland Ry. as a connection with Canadian Rys.
28,813	10,895	35,170	18	....	67	
61,084	8,549	21,479	20	20	68	
83,652	134,940	949,922	30	12	69	
80,163	....	....	....	....	70	
187,047	178,853	243,787	32	20	71	Running powers: Grand Trunk, 13·20; Canadian Pacific, 8·70.
19,779	730	2,104	18	14	72	
424,183	153,245	2,343,356	27	17	73	
79,818	140,412	42,296	40	22	74	
85,927	26,707	66,753	26	17	75	

No. 4.—SUMMARY STATEMENT of the Operations of the Year

Number.	Name of Railway.	Mileage.	Train Mileage.			
			Passenger Trains.	Freight Trains.	Mixed Trains.	Total Train Mileage.
76	Tilsonburg, Lake Erie and Pacific.	20·00	13,000	7,000	20,000	40,000
77	Thousand Islands	6·33	....	....	25,082	25,082
78	Toronto, Hamilton and Buffalo.........	89·16	161,092	120,100	738	281,930
79	United Counties.. .... East Richelieu Valley...............	....	....	....	....	....
80	Victoria and Sidney.....................	16·26	....	....	24,250	24,250
81	York and Carleton	5·75	....	....	....	....
		18,139·97	19,115,472	23,888,302	10,345,620	53,349,394

and Mileage, for the Year ended June 30, 1901 —*Concluded.*

Engine Mileage.	Total Number of Passengers Carried.	Tons of Freight of 2,000 lbs. Handled.	Average Rate of Speed of Passenger Trains—Miles per Hour.	Average Rate of Speed of Freight Trains—Hour.	Number.	Remarks.
40,000	19,201	13,458	30	30	76	
25,082	28,276	19,321	......	......	77	
462,345	201,671	616,987	35	20	78	Running powers Hamilton and Dundas Street Ry., Hamilton to Dundas, 3·67 miles.
....	.. ..	.. ..	....	....	79	Now Quebec Southern, see No. 64.
24,250	22,761	18,726	25	25	80	
... .	....	... .	....	....	81	This Ry. has only been in operation for one month.
68,621,424	18,385,722	36,999,371	....	....		

No. 5.—SUMMARY STATEMENT of Description of

Number.	Name of Railway.	Mileage.	Flour.		Grain.		Live
			Barrels.	Tons.	Bushels.	Tons.	No.
1	Alberta Railway and Coal Co.	64·62	186	18	13,035	234	527
2	Albert Southern. Harvey Branch.	....	....	....	....	....	....
3	Algoma Central and Hudson Bay	42·00	....	....	297,333	9,545	421
4	Atlantic & Lake Superior, comprising— Baie des Chaleurs ... 98·00 Great Eastern, not under traffic 23·00 Ottawa Valley " " 7·00	98·00	7,460	746	4,403	75	230
5	Bay of Quinté Ry. and Navigation Co. ... 4·00 Kingston, Napanee & Western. 60·82	64·82	22,560	2,256	183,818	5,055	7,055
6	Bedlington and Nelson	15·20	580	58	....	....	59
7	British Yukon	90·45	11,078	1,108	236,550	3,785	....
8	Brockville, Westport & Sault Ste. Marie	45·00	11,906	1,191	88,065	2,641	11,957
9	Buctouche and Moncton	32·00	....	....	....	....	....
10	Calgary and Edmonton	295·93	19,618	1,962	1,305,546	23,296	42,480
11	Canada Atlantic, including Ottawa, Arnprior & Parry Sound ... 400·00 Leased— Central Counties ... 37·00 Pembroke Southern ... 21·00	458·00	679,589	67,959	19,301,281	482,531	37,770
12	Canada Coals & Ry. Co., formerly Joggins	12·00	1,456	146	22,746	389	....
13	Canada Eastern	136·00	73,600	7,300	128,300	2,131	601
14	Canada Southern	382·19	1,446,980	144,698	51,699,525	599,397	705,002
15	Canadian Northern, comprising— Lake Manitoba Ry. and Canal Co's Line Winnipeg Great Northern Manitoba South Eastern Ontario and Rainy River P. Arthur, Duluth and Western	522·00	50,951	4,762	756,613	20,812	6,222
16	Canadian Government Railways—						
	Intercolonial	1,301·94	1,292,106	129,210	3,535,364	77,518	95,923
	Prince Edward Island	209·00	21,843	2,184	811,110	13,909	17,924
17	Canadian Pacific— Owned ... 4,554·20 Leased lines— Fredericton ... 22·10 New Brunswick ... 175·00 New Brunswick & Canada 117·20 St. John and Maine ... 92·10 St. John Bridge and Railway Extension ... 2·00 St. Stephen and Milltown 4·60 Tobique Valley ... 28·00 Cap de la Madeleine ... 3 00						

Freight carried for the Year ended June 30, 1901.

Stock.	Lumber of all kinds except Firewood.		Firewood.		Manufactured Goods.	All other Articles.	Total Weight Carried.	Number.	Remarks.
Tons.	Feet.	Tons.	Cords.	Tons.	Tons.	Tons.	Tons.		
306	879,320	1,319	.....	....	689	*67,315	69,881	1	*Including 40,801 tons coke and 25,415 tons coal.
....	....	....	....	....	....	....	....	2	No return, not in operation.
263	5,876,000	8,814	45	90	54,389	129,265	202,366	3	
40	848,084	848	870	1,305	13,000	4,000	20,014	4	
2,822	52,009,143	91,016	35,511	53,267	63,876	63,949	282,241	5	
15	36,000	54	236	299	26	†30,841	31,293	6	†Includes 13,227 tons ore and 17,021 tons coal. Running powers on C.P.R.. Creston Jct. to Sirdar Jct. 8·70 miles.
3,891	2,966,250	3,532	....	....	17,655	8,237	33,208	7	
1,629	371,618	721	.....	....	5,986	2,102	14,270	8	
....	8,703,000	7,174	2,862	5,723	1,873	*5,845	20,615	9	* Includes produce, stone coal, &c.
19,766	9,712,973	12,613	839	1,258	29,466	9,843	98,204	10	Operated by C.P.R.
9,442	318,690,000	438,202	73,137	120,677	99,964	*374,212	1,592,987	11	*Includes, coal 162,843 tons.
....	283,500	405	......	....	1,996	65,291	68,227	12	
305	38,100,000	38,100	10,700	13,375	32,462	44,678	138,411	13	
175,898	168,013,000	263,750	29,112	43,194	625,931	2,869,408	4,722,276	14	
2,842	23,965,000	43,382	50,077	75,115	13,337	60,644	220,894	15	Also leased lines, Northern Pacific & Manitoba, and Portage & Northwes'rn for month of June, 1901, for mileage. See Nos. 50 and 58. Running powers over Man. & Northwestern Ry., 36·0 miles from Portage la Prairie to Gladstone Jct.
15,079	396,858,964	496,074	69,024	120,792	450,118	822,519	2,111,310	16	Running power on Grand Trunk— Point Lévis to Hadlow.... 1·50 Chaudière curve to Chaudière.. 1·18 St. Rosalie Junction to Montreal.. 37·62 40·30
2,220	2,985,000	4,921	3,271	5,790	....	44,672	73,696		

No. 5.—SUMMARY STATEMENT of Description of

Number.	Name of Railway.	Mileage.	Flour.		Grain.		Live
			Barrels.	Tons.	Bushels.	Tons.	No.
	Can. Pac.—Leased lines—*Con.* Montreal & L. Maskinongé 11·00 Atlantic and North-west..201·40 Montreal and Ottawa.... 93·20 Ontario and Quebec......474·50 St. Lawrence and Ottawa. 58·40 Credit Valley ....175·70 Guelph Junction......... 15·00 Toronto, Grey and Bruce.191·10 West Ontario Pacific..... 26·60 Manitoba & North-west'rn252·60 Manitoba South-western Colonization........214·40 Columbia and Kootenay.. 60·50 Nakusp and Slocan. .... 36·30 Shuswap and Okanagan.. 50·80 Columbia and Western...157·90 Great North-west Central 71·00 B. Columbia Southern....202·20	7,290·80	3,733,423	373,341	32,894,928	836,967	942,638
18	Caraquet	68·00	6,000	600	2,000	34	300
19	Carillon and Grenville	13·00	....	....	....	....	94
20	Central Ontario..............125·00 Ontario, Belmont & Northern 9·60	134·60	12,123	1,188	217,920	5,448	4,176
21	Central of New Brunswick	45·66	150	15	....	....	....
22	Central of Nova Scotia, formerly Nova Scotia Central	74·00	12,426	1,242	19,821	530	249
23	Cumberland Ry. and Coal Co's. Line	32·00	12,806	1,280	45,440	772	12
24	Dominion Atlantic, comprising— Windsor and Annapolis..... 87·50 Cornwallis Valley .... 14·00 Yarmouth and Annapolis... 87·00 Windsor Branch of Intercolonial............... 32·00	220·50	153,515	15,351	....	....	11,107
25	Elgin and Havelock	28·00	2,381	238	2,391	57	2,031
26	Esquimalt and Nanaimo	78·00	2,670	267	23,000	575	5,466
27	Fredericton and St. Mary's Railway Bridge	1·33	....	....	....	....	....
28	Grand Trunk .... 880·35 Wharf Branch, Montreal .... 3·44 883·79 Great Western............561·80 Brantford, Norfolk and Port Burwell.............. 34·39 Buffalo and Lake Huron....162·00 Grand Trunk, Georgian Bay and Lake Erie........... 171·00 Owen Sound Branch........ 12·42 London, Huron and Bruce.. 68·00 Waterloo Junction....... 10·25 South Norfolk............ 17·00 Wellington, Grey and Bruce.168·13 Northern .... 172·10 North Simcoe............. 33·00 Hamilton & North-western.172·00 Northern Pacific Junction..111·37 Toronto Belt Line......... 12·79 Midland .... 166·00 Grand Junction.......... 85·21	3,138·98	5,318,790	531,879	74,264,120	1,856,603	1,356,555

Freight carried for the Year ended June 30, 1901—*Continued.*

Stock.	Lumber of all kinds except Firewood.		Firewood.		Manufactured Goods.	All other Articles.	Total Weight Carried.	Number.	Remarks.
Tons.	Feet.	Tons.	Cords.	Tons.	Tons.	Tons.	Tons.		
236,118	898,554,142	1,192,807	204,713	352,408	1,950,254	2,203,381	7,145,276	17	Also running powers on Grand Trunk Toronto to Hamilton Jct. ...... 36·20 Toronto, Hamilton & Buffalo Ry. Hamilton Junction to Hamilton .. 2·70 C.A.R., Montreal and Ottawa Jct. to Ottawa .. 0·80 39·70
125	9,000,000	13,500	300	425	2,700	1,520	18,904	18	
42	....	....	......	....	40	90	172	19	
2,088	11,003,200	13,754	50,388	100,777	50,977	*20,997	195,229	20	*Includes 11,049 tons iron ore.
....	192,800	2,410	406	691	....	*1,394	4,510	21	*930 tons of coal included.
55	10,899,097	16,351	2,217	3,326	3,494	8,826	33,824	22	Running powers over Dom. Atlantic from Middleton Jct. to Middleton, 0·33 miles.
6	11,358,000	19,876	....	....	8,177	*407,895	438,006	23	*407,895 tons of coal.
2,829	35,350,000	52,950	1,750	2,575	43,482	*104,426	221,613	24	*Apples, produce & minerals, included.
152	3,037,000	5,045	165	230	1,555	345	7,622	25	Running power over I.C.R., Halifax to Windsor Jct., 14 miles.
709	8,269,265	13,769	12,093	10,884	8,148	124,243	158,595	26	
....	....	....	....	......	....	....	......	27	Running powers on Canada Eastern, 0·17 miles.
271,311	651,733,500	1,303,467	208,974	313,461	1,262,631	4,214,205	9,753,557	28	

No. 5.—SUMMARY STATEMENT of Description of

Number.	Name of Railway.	Mileage.	Flour.		Grain.		Live
			Barrels.	Tons.	Bushels.	Tons.	No.
	Grand Trunk—*Con.*						
	Toronto and Nipissing 85·00 Lake Simcoe Junction 26·00 Victoria 53·00 Whitby, Port Perry and Lindsay 46·00 Jacques Cartier Union 6·50 Montreal and Champlain Junction 61·73 Beauharnois Junction 19·50						
29	Gulf Shore	16·78	3,000	300	2,000	34	20
30	Halifax and Yarmouth (formerly Coast Line of Nova Scotia)	30·80	16,080	1,608	16,602	430	156
31	Hampton and St. Martin's	29·00	......	......	......	......	......
32	Hereford	53 30	7,270	727	46,872	837	500
33	Inverness and Richmond	56·50	......	......	......	......	......
34	Irondale, Bancroft and Ottawa	48·00	2,070	207	9,180	230	2,032
35	Kaslo and Slocan	31·80	740	74	5,250	158	17
36	Kent Northern, including St. Louis and Richibucto	34·00	2,235	223	4,450	75	12
37	Kingston and Pembroke	112·85	11,785	1,155	57,000	1,710	240
38	L'Assomption	3·33	960	96	850	16	......
39	Lake Erie and Detroit River, including Erie & Huron 155·72 Leased London & Pt. Stanley 24·00	179·72	95,622	10,327	1,863,190	48,270	117,877
40	Lenora Mount Sicker	6·25	......	......	......	......	......
41	Lotbinière and Mégantic	30·34	2,720	272	1,441	24	70
42	Massawippi Valley	35·46	17,130	1,713	764,050	15,281	14,733
43	Montfort and Gatineau Colonization	33·00	4,600	460	10,000	170	......
44	Montreal and Atlantic, formerly South-eastern 102·70 Lake Champlain and St. Lawrence Junction 60·70	163·40	619,846	62,185	3,571,759	87,465	30,005
45	Montreal and Province Line	40·60	3,500	350	15,480	430	132
46	Montreal and Vermont Junction	23·60	343,860	34,386	7,940,555	226,873	73,864
47	New Westminster Southern	24·10	2,390	239	32,477	876	65
48	Nelson and Fort Sheppard	54·70	13,970	1,397	6,615	147	2,118
49	New Brunswick and Prince Edward Island	36·00	15,735	1,573	44,000	880	1.339
50	Northern Pacific and Manitoba	320·51	19,430	1,943	2,514,108	42,612	3,325

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* Includes, ore and copper, 28,743 tons; bark, 6,631 tons; wood pulp, 48,152 tons; stone and sand,

Freight carried for the Year ended June 30, 1901—*Continued.*

Stock.	Lumber of all kinds except Firewood.		Firewood.		Manufactured Goods.	All other Articles.	Total Weight Carried.	Number.	Remarks.
Tons.	Feet.	Tons.	Cords.	Tons.	Tons.	Tons.	Tons.		
10	3,000,000	3,300	20	30	....	889	4,563	29	
78	1,022,117	1,533	121	182	1,986	2,086	7,903	30	Also 19·3 miles not in operation, but was in operation last year.
....	....	17,037	....	52	....	*1,701	18,790	31	*Includes 113 tons of coal.
595	12,511,800	20,583	21,876	43,752	11,117	10,592	88,203	32	
....	....	....	....	....	....	†	....	33	†Road not opened for traffic until June 15, 1901, and no separate returns for the 15 days in June are available.
508	214,000	288	2,208	3,863	1,777	12,716	19,589	34	Includes pulp wood, telegraph poles, &c.
7	1,131,250	1,970	10	12	1,950	*14,426	18,597	35	*Ore 12,333 tons.
6	470,000	705	215	150	2,911	....	4,070	36	
120	25,230,000	37,846	13,203	24,375	34,447	5,595	105,248	37	
....	50,000	75	....	....	259	....	446	38	
16,722	71,916,200	89,895	6,589	9,906	32,907	312,259	520,286	39	
....	110,000	110	....	....	....	*7,665	7,775	40	*Includes 7,315 tons copper ore.
16	6,096,000	6,974	7,428	9,285	137	11,440	28,148	41	
1,961	83,904,000	115,356	....	....	20,148	*125,302	279,761	42	*Includes.—See foot note.
....	3,500,000	10,880	900	2,900	975	11,800	27,185	43	Running powers on G.T.R. from Lennoxville to Sherbrooke, 2·95 miles.
7,458	60,411,850	81,007	13,650	20,475	262,192	213,137	733,919	44	Also 36·6 miles, Sorel to Drum'ondville not in operation.
33	6,914,352	10,472	193	288	3,139	33,368	48,080	45	
18,466	31,222,746	48,681	368	558	164,483	451,939	945,386	46	
1	308,000	112	....	....	1,574	5,850	8,652	47	
706	1,764,500	3,529	1,376	1,972	5,723	*10,811	24,285	48	Running powers on C.P.R. from Five mile Point to Nelson, 4·70 miles. *Includes 5,282 tons of ore.
181	14,252,000	28,520	1,176	2,960	2,652	10,310	47,076	49	
1,847	6,486,249	9,933	14,930	26,193	12,218	63,408	158,154	50	For 11 months only to May 31, 1901, at which date this property was leased to Prov. of Manitoba.

13,614 tons.

No. 5.—SUMMARY STATEMENT of Description of

Number.	Name of Railway.	Mileage.	Flour.		Grain.		Live
			Barrels.	Tons.	Bushels.	Tons.	No.
51	Nosbonsing and Nipissing	5·50	....	....	....	....	....
52	Nova Scotia Steel Company's Ry	12·50	1,151	115	8,560	150	....
53	Orford Mountain	26·50	6,560	656	11,430	229	884
54	Ottawa, Northern and Western	57·87	19,923	1,992	59,446	1,166	5,274
55	Ottawa and New York	56 79	5,600	560	34,950	1,049	1,843
56	Philipsburg Junction and Quarry Co. Railway	7·50	....	....	....	....	....
57	Pontiac Pacific Junction	70·60	28,068	2,806	165,925	3,385	10,900
58	Portage and North-western	35·07	....	....	276,356	4,684	175
59	Qu'Appelle, Long Lake and Saskatchewan	253·96	6,549	655	406,393	12,107	10,975
60	Quebec Central	213·50	158,097	15,809	36,370	1,091	50,900
61	Quebec and Lake St. John	242·00	38,601	3,860	126,818	2,536	2,325
	Great Northern (St. Tite to St. Boniface) 20·00 Lower Laurentian (Riv. à Pierre to St. Tite) 35·00	....	....	....	....	....	....
62	Great Northern Ry. of Canada, including Lower Laurentian (for 8 months only ending June 30, 1901, previous 4 months included in Quebec and Lake St. John)	175·10	46,860	4,686	1,056,755	26,418	418
63	Quebec, Montmorency and Charlevoix	30·00	5,716	582	13,073	379	41
64	Quebec Southern	83·80	19,610	1,961	163,000	3,743	1,220
65	Red Mountain	9·53	7,620	762	3,619	76	270
66	Rutland and Noyan, operated by Rutland Ry. as a connection with Canadian Rys	5·00	....	....	....	....	....
67	Salisbury and Harvey	45·00	4,563	456	31,833	541	341
68	Shore Line, New Brunswick	82·50	3,484	348	22,972	382	35
69	Stanstead, Shefford and Chambly	43·00	351,940	35,194	8,628,515	246,529	73,700
70	St. Clair Tunnel	2·23	....	....	....	....	....
71	St. Lawrence and Adirondack	33·00	15,860	1,586	77,600	1,940	498
72	St. Mary's River	30·00	64	6	8,850	159	374
73	Sydney and Louisburg, Dominion Coal Co's line	48·96	3,000	300	2,700	70	212
74	South Shore, formerly Montreal and Sorel	61·50	2,589	258	10,403	326	228
75	Temiscouata	113·00	15,315	1,532	37,097	556	336
76	Tilsonburg, Lake Erie and Pacific	20·00	3,900	390	22,900	610	10,000
77	Thousand Islands	6 33	4,890	489	8,909	245	1,312
78	Toronto, Hamilton and Buffalo	89·16	29,030	2,903	608,611	17,011	62,648
79	United Counties Leased East Richelieu Valley	....	....	....	....	....	....
80	Victoria and Sidney, B.C	16·26	1,514	151	31,711	649	3,258
81	York and Carleton. This railway has only been in operation one month	5·75	....	....	....	....	....
		18,139·97	14,857,644	1,486,351	214,613,974	4,694,853	3,733,471

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*Includes pulp wood, asbestos, pulp, brick, lime, butter and cheese, etc. Running powers on I.C.R.,

Freight carried for the Year ended June 30, 1901—*Concluded.*

Stock.	Lumber of all kinds except Firewood.		Firewood.		Manufactured Goods.	All other Articles.	Total Weight Carried.	Number.	Remarks.
Tons.	Feet.	Tons.	Cords.	Tons.	Tons.	Tons.	Tons.		
....	13,460,000	190,300	....	....	....	....	190,300	51	
....	4,730,000	5,910	20	15	354	*153,762	160,306	52	Including ore, pig iron, coal, etc.
198	6,479,000	7,242	3,120	4,680	673	6,765	20,443	53	
817	3,790,000	5,683	3,100	4,505	10,239	8,832	33,231	54	
1,106	5.038,000	6,297	4,846	7,269	2,263	20,532	39,076	55	
....	10,000	15	32	35	232	3,903	4,185	56	For 11 months only to May 31, 1901, at which date this property was leased to the Province of Manitoba.
1,049	3,150,000	4,724	250	375	6,067	5,250	23,656	57	
97	1,695,188	2,596	473	830	1,009	2,099	11,315	58	
5,401	3,999,987	5,080	1,662	2,494	6,162	995	32.894	59	
3,819	62,637,410	93,956	8,744	16,394	9,224	*229,717	370,010	60	See foot note.
660	90,900,000	131,736	23,550	42,390	19,869	140,639	341,690	61	
....	....	....	....	....	....	....	....		Included in Que. & Lake St. John for 4 mos. only up to Oct. 31, '00, for balance of year. See Great Northern Ry. of Can.
209	24,058,000	36,087	9,814	6,543	35,962	75,792	185,697	62	Running powers on Quebec & Lake St. John; Quebec to River a Pierre, 58·00 miles.
38	924,616	1,621	3,911	4,029	4,980	12,864	24,493	63	
610	7,803,000	11,705	*44,042	*88,084	2,978	25,434	134,515	64	*Includes pulp wood. Running powers on South Shore, St. Robert Jct. to Sorel 6·00 miles.
172	8,240,500	16,481	12,740	14,787	2,156	*241,447	275,881	65	*237,755 tons of ore, included.
....	....	....	....	....	....	....	....	66	
170	10,917,000	13,646	1,595	2,990	436	*16,931	35,170	67	*Includes 13,877 tons plaster.
35	7,710,000	11,565	447	894	6,123	2,132	21,479	68	
18,425	36,168,096	53,806	261	396	150,765	444,807	949,922	69	
....	....	....	....	....	....	....	....	70	No record kept.
249	25,625,333	38,438	3,515	2,343	9,845	189,386	243,787	71	Running power. G.T.R., 13·20, C.P.R., 8·70 miles.
218	313,000	470	....	....	350	901	2,104	72	
85	26,050,400	65,101	....	....	700	*2,277,100	2,343,356	73	*Includes 2,144,800 tons coal; and pig iron, brick, sand, gravel and stone.
40	2,498,505	3,747	62	123	22,576	15,226	42,296	74	
168	46,541,460	46,541	3,804	6,762	3,735	7,459	66,753	75	
1,000	850,275	2,900	600	1,007	567	6,984	13,458	76	
525	1,665,715	2.915	....	....	9,860	5,287	19,321	77	
6,826	4,740,062	8,699	3,268	5,177	31,760	544,611	616,987	78	Running powers on Hamilton & Dundas St. Ry., Hamilton to Dundas, 3·67 miles.
....	....	....	....	....	....	....	....	79	Now Quebec Southern. See No. 64.
310	341,700	598	6,211	12,422	1,241	3,355	18,726	80	
....	....	....	....	....	....	....	....	81	
838,895	3,400,547,167	5,301,519	977,020	1,597,159	5,642,947	17,437,647	36,999,371		

Harlaka Jct. to Lévis, 5 miles.

No. 6.—SUMMARY STATEMENT of Earnings

Number.	Name of Railway.	Mileage.	Passenger Traffic.	Freight Traffic.	Mails and Express Freight.
			$ cts.	$ cts.	$ cts.
1	Alberta Railway and Coal Co.	64·62	9,831 26	52,023 49	1,220 57
2	Albert Southern	....	....	....	....
	Harvey Branch				
3	Algoma Central and Hudson Bay	42·00	18,385 26	125,741 21	250 00
4	Atlantic and Lake Superior, comprising—				
	Baie des Chaleurs 98·00	98·00	10,224 00	20,395 74	3,016 94
	Great Eastern, 23 miles not under traffic				
	Ottawa Valley 7 " "				
5	Bay of Quinte Ry. and Navigation Co. 4·00	64·82	24,537 24	146,461 20	3,441 11
	Kingston, Napanee and Western 60·82				
6	Bedlington and Nelson	15 20	4,027 01	10,271 82	111 23
7	British Yukon	90·45	113,021 75	708,532 37	8,349 70
8	Brockville, Westport and Sault Ste. Marie	45·00	15,161 15	16,996 36	2,739 09
9	Buctouche and Moncton	32·00	4,243 19	10,820 92	369 15
10	Calgary and Edmonton	295·93	119,610 72	274,587 04	11,192 03
11	Canada Atlantic, including Ottawa, Arnprior & Parry Sound 400·00	458 00	283,658 22	1,390,197 10	29,276 01
	Leased Central Counties 37·00				
	Pembroke Southern 21·00				
12	Canada Coals and Railway Co., formerly Joggins	12·00	2,586 65	25,608 18	451 91
13	Canada Eastern	136·00	31,440 62	95,618 39	3,981 46
14	Canada Southern	382·19	1,030,163 03	3,789,571 36	261,009 46
15	Canadian Northern, comprising—				
	Lake Manitoba Ry. and Canal Co.'s line	522·00	93,700 26	279,473 86	5,715 51
	Winnipeg Great Northern				
	Manitoba South-Eastern				
	Ontario and Rainy River				
	Port Arthur, Duluth and Western				
16	Canadian Government Railways—				
	Intercolonial	1,301 94	1,607,166 79	3,121,006 15	244,062 93
	Prince Edward Island	209·00	78,689 73	97,425 85	17,310 90
17	Canadian Pacific Railway –	7,290·80	7,992,976 53	18,651,233 27	1,302,175 13
	owned 4,554·20				
	Leased lines—				
	Fredericton 22·10				
	New Brunswick 175·00				
	New Brunswick and Canada 117·20				
	St. John and Maine 92·10				
	St. John Bridge & Ry. Extension 2·00				
	St. Stephen and Milltown 1·60				
	Tobique Valley 28·00				
	Cap de la Madeleine 3·00				
	Montreal and Lake Maskinongé 11·00				
	Atlantic and North-west 201·40				
	Montreal and Ottawa 93·20				
	Ontario aud Quebec 474·50				
	St. Lawrence and Ottawa 58·40				
	Credit Valley 175·70				
	Guelph Junction 15·00				
	Toronto, Grey and Bruce 191·10				
	West Ontario Pacific 26·60				
	Manitoba and North-western 252·60				
	Manitoba South-western Colonization 214·40				
	Columbia and Kootenay 60·50				
	Nakusp and Slocan 36·30				
	Shuswap and Okanagan 50·80				
	Columbia and Western 157·90				
	Great North-west Central 71·00				
	British Colnmbia Southern 202·20				
18	Caraquet	68·00	5,198 67	18,202 01	1,984 66

SESSIONAL PAPER No. 20

for the Year ended June 30, 1901.

Other Sources.	Total Gross Earnings.	Total Net Earnings.	Proportion of Earnings to Working Expenses.	Earnings per Train Mile.	Number.	Remarks.
$ cts.	$ cts.	$ cts.	p. c.	Cts.		
93,983 79	157,059 11	50,314 38	147	223·00	1	
....	....	....	.....	....	2	No return; not in operation.
1,620 11	140,996 58	79,125 47	228	463·73	3	
....	33,636 68	544 81	102	51·75	4	
5,687 76	185,127 51	79,843 84	176	138·11	5	
133 13	14,543 19	- 12,632 25	54	79·85	6	Running powers on C.P.R. from Creston Junction to Sirdar Junction, 8·70 miles.
16,417 60	846,321 42	562,790 87	298	906·71	7	
218 45	35,115 05	3,019 18	109	104·86	8	
535 73	15,968 99	- 2,764 07	85	86·63	9	
963 04	406,352 83	178,820 01	179	185·10	10	Operated by C.P.R.
83,206 94	1,786,338 27	374,905 23	127	116·52	11	
328 87	28,975 61	15,888 20	221	82·16	12	
2,412 78	133,453 25	11,670 34	110	68·99	13	
13,630 41	5,094,374 26	314,520 55	107	128·55	14	
4,473 52	383,363 15	161,451 47	173	181·98	15	Also leased lines Northern Pacific & Manitoba & Portage & Northwestern for month of June, 1901; for mileage, see Nos. 50 and 58. Running powers over the Man. & Northwestern Ry., 36·0 miles from Portage la Prairie to Gladstone Jct.
....	4,972,235 87	- 488,186 77	91	79·39	16	Running powers over the Grand Trunk— Point Levis to Hadlow.. . .. 1·50 Chaudière curve to Chaudiere.... 1·18 Ste. Rosalie to Montreal........ 37·62 Total, Miles. .... 40·30
457 00	193,883 48	- 67,882 76	74	71·74		
2,432,204 36	30,378,589 29	12,127,168 58	166	171·91	17	Also running powers on— G.T.R., Toronto to Hamilton Jct. 36·20 T. H. & B. Ry., Hamilton Jct. to Hamilton. .... 2·70 C.A. Ry., Montreal and Ottawa Jct. to Ottawa................ 0·80 Total, Miles........ .... 39·70
787 60	26,172 94	- 1,045 98	96	55·69	18	

No. 6.—SUMMARY STATEMENT of Earnings

Number.	Name of Railway.		Mileage.	Passenger Traffic.	Freight Traffic.	Mails and Express Freight.
				$ cts.	$ cts.	$ cts.
19	Carillon and Grenville		13 ·00	1,718 53	138 31	....
20	Central Ontario	125·00	134·60	40,059 68	120,827 57	9,937 50
	Ontario, Belmont and Northern	9·60				
21	Central of New Brunswick		45·66	534 06	1,961 42	1,153 08
22	Central of Nova Scotia, formerly Nova Scotia Central		74·00	278,34 53	28,046 64	3,199 57
23	Cumberland Ry. and Coal Co.'s line		32·00	10,418 77	17,950 51	2,938 22
24	Dominion Atlantic, comprising—					
	Windsor and Annapolis	87·50	220·50	514,966 13	298,109 79	56,276 91
	Cornwallis Valley	14·00				
	Yarmouth and Annapolis	87·00				
	Windsor Branch of Intercolonial	32·00				
25	Elgin and Havelock		28·00	1,226 56	5,267 03	491 87
26	Esquimalt and Nanaimo		78·00	99,920 30	115,885 90	2,920 32
27	Fredericton and St. Mary's Ry. Bridge Co.		1·33	908 25	4,008 53	....
28	Grand Trunk 880·35	883.79	3,138·98	5,650,866 30	13,584,583 82	982,008 37
	Wharf Branch, Montreal 3·44					
	Great Western	561·80				
	Brantford, Norfolk and Port Burwell	34·39				
	Buffalo and Lake Huron	162·00				
	Grand Trunk, Georgian Bay and Lake Erie	171·00				
	Owen Sound Branch	12·42				
	London, Huron and Bruce	68·00				
	Waterloo Junction	10 25				
	South Norfolk	17·00				
	Wellington, Grey and Bruce	168·13				
	Northern	172·10				
	North Simcoe	33·00				
	Hamilton and North-western	172·00				
	Northern and Pacific Junction	111·37				
	Toronto Belt Line	12 79				
	Midland	166·00				
	Grand Junction	85·21				
	Toronto and Nipissing	85·00				
	Lake Simcoe Junction	26·00				
	Victoria	53·00				
	Whitby, Port Perry and Lindsay	46·00				
	Jacques Cartier Union	6·50				
	Montreal and Champlain Junction	61·73				
	Beauharnois Junction	19·50				
29	Gulf Shore		16·78	350 20	1,923 23	....
30	Halifax and Yarmouth, formerly Coast Line of Nova Scotia		30·80	22,158 74	9,766 37	2,104 63
31	Hampton and St. Martins		29·00	2,982 07	7,792 70	....
32	Hereford		53·30	11,401 37	32,424 57	1,302 55
33	Inverness and Richmond		56·50	....	....	....
34	Irondale, Bancroft and Ottawa		48·00	4,547 15	13,411 53	958 59
35	Kaslo and Slocan		31·80	15,289 50	50,328 92	1,547 77
36	Kent Northern, including St. Louis and Richibucto		34·00	3,597 53	6,946 88	842 40
37	Kingston and Pembroke		112·85	31,751 29	111,115 66	8,954 54
38	L'Assomption		3·33	907 15	218 20	65 00
39	Lake Erie and Detroit River, including Erie and Huron	155·72	179·72	152,672 88	269,153 07	15,610 66
	Leased London and Port Stanley	24·00				
40	Lenora Mount Sicker		6·25	....	1,126 92	....
41	Lotbinière and Mégantic		30·34	2,819 01	12,837 93	....
42	Massawippi Valley		35·46	48,524 44	77,499 97	2,965 56
43	Montfort and Gatineau Colonization		33·00	5,727 30	14,238 86	491 94

for the Year ended June 30, 1901—*Continued.*

Other Sources.	Total Gross Earnings.	Total Net Earnings.	Proportion of Earnings to Working Expenses.	Earnings per Train Mile.	Number.	Remarks.
$ cts.	$ cts.	$ cts.	p. c.	Cts.		
499 14	2,355 98	-- 1,142 81	67	36 25	19	
8,202 69	179,027 44	72,659 36	168	145·55	20	
176 90	3,825 46	- 35,331 98	10	40·27	21	
772 84	59,853 58	15,365 72	135	121·26	22	Running powers on Dominion Atlantic, Middleton Jct. to Middleton, 0·33 miles.
90,632 26	121,939 76	60,004 85	197	162·30	23	
....	869,352 83	167,859 75	124	167·06	24	Running powers on I. C. R., Halifax to Windsor Junction, 14·00 miles.
16 00	7,001 46	- 3,968 75	64	48·38	25	
15,467 58	234,194 10	18,027 71	108	118·98	26	
500 00	5,416 78	4,184 86	440	....	27	Running powers on Canada Eastern, 0·17 miles. The earnings are receipts from tolls on trains run across the bridge by Canada Eastern and Canadian Pacific Railway Co's.
683,488 15	20,900,946 64	7,584,815 30	157	126·76	28	
....	2,273 43	1,015 73	181	70·82	29	
1,486 16	35,515 90	8,287 83	130	76·89	30	Also 19·3 miles not in operation, but was in operation last year.
640 92	11,415 69	- 3,121 24	79	60·08	31	
15 54	45,144 03	- 22,912 57	66	69·17	32	
1,313 86	1,313 86	189 35	117	....	33	Road not open for traffic until June 15, 1901, and no separate returns for the 15 days in June are available.
....	18,917 27	- 598 96	97	62·16	34	
260 63	67,426 82	26,962 45	167	269·89	35	
....	11,386 81	1,706 81	118	63·26	36	
11,268 32	163,089 81	32,678 55	125	120·61	37	
12 00	1,202 35	- 458 75	72	19·56	38	
31,876 60	469,313 21	160,492 86	152	123·57	39	
....	1,126 92	- 7,877 47	13	22·36	40	
81 30	15,738 24	2,380 68	118	89·91	41	
....	128,989 97	18,851 03	117	84 03	42	Running powers on G. T. R., Sherbrooke to Lennoxville, 2·95 miles.
714 57	21,172 67	- 1,386 52	94	40.53	43	

No. 6.—SUMMARY STATEMENT of Earnings

Number.	Name of Railway.	Mileage.	Passenger Traffic.	Freight Traffic.	Mails and Express Freight.
			$ cts.	$ cts.	$ cts.
44	Montreal and Atlantic, formerly South Eastern.......... 102·70 Lake Champlain and St. Lawrence Junct.......... 60·70	163·40	115,842 58	264,559 13	10,475 69
45	Montreal Province Line..........	40·60	30,634 01	24,233 91	3,219 24
46	Montreal and Vermont Junction..........	23·60	63,787 90	119,463 88	5,072 50
47	New Westminster Southern..........	24·10	5,348 03	2,064 07	1,438 48
48	Nelson and Fort Sheppard..........	54·70	34,077 37	48,739 03	3,235 63
49	New Brunswick and Prince Edward Island....	36·00	5,514 01	16,961 80	1,041 93
50	Northern Pacific and Manitoba..........	320·51	78,695 01	169,781 37	8,489 64
51	Nosbonsing and Nipissing..........	5·50	....	33,536 55	....
52	Nova Scotia Steel Co.'s Ry..........	12·50	1,272 10	12,427 23	....
53	Orford Mountain..........	26·50	1,928 59	12,311 76	524 16
54	Ottawa, Northern and Western..........	57·87	38,249 51	39,399 23	3,565 27
55	Ottawa and New York..........	56·79	42,458 02	29,876 68	2,322 88
56	Philipsburg Junction and Quarry Co.'s Ry.....	7·50	62 52	1,458 68	....
57	Pontiac Pacific Junction..........	70·60	24,568 85	24,723 68	3,642 64
58	Portage and North-western..........	35·07	674 35	4,953 87	254 54
59	Qu'Appelle, Long Lake and Saskatchewan.....	253·96	33,388 57	94,726 73	3,408 33
60	Quebec Central..........	213·50	181,840 09	386,272 63	18,909 36
61	Quebec and Lake St. John..........	242·00	111,131 07	238,872 19	13,898 86
	Great Northern (St. Tite to St. Boniface).......... 20·00 Lower Laurentian (Riv. à Pierre to St. Tite).......... 35.00	....	....	....	....
62	Great Northern Ry. of Canada, including Lower Laurentian (for 8 mos. only ending June 30, 1901, previous 4 months included in Quebec & Lake St. John)..........	175·10	26,122 53	109,101 21	1,456 09
63	Quebec, Montmorency and Charlevoix..........	30·00	71,602 35	18,557 96	1,131 12
64	Quebec Southern, including United Counties and East Richelieu Valley..........	83·80	20,256 73	50,394 20	1,455 14
65	Red Mountain..........	9·53	13,900 34	87,645 15	957 49
66	Rutland and Noyan. Operated by Rutland Ry. as a connection with Canadian Rys..........	5·00	....	....	....
67	Salisbury and Harvey..........	45·00	6,865 18	15,807 18	2,477 35
68	Shore Line, New Brunswick..........	82·50	10,993 70	18,281 43	3,201 86
69	Stanstead, Shefford and Chambly..........	43·00	22,476 82	46,932 24	2,744 77
70	St. Clair Tunnel..........	2·23	35,098 67	176,566 84	* 162 50
71	St. Lawrence and Adirondack..........	33·00	84,636 80	97,903 20	5,636 02
72	St. Mary's River..........	30·00	992 93	2,756 06	23 31
73	Sydney & Louisburg—Dominion Coal Co.'s line.	48·96	48,656 37	504,714 22	600 00
74	South Shore, formerly Montreal and Sorel.....	61·50	38,064 76	16,755 57	2,338 33
75	Témiscouata..........	113·00	25,211 50	62,294 74	....
76	Tilsonburg, Lake Erie and Pacific..........	20·00	5,167 26	7,935 63	492 76
77	Thousand Islands..........	6·33	5,602 42	13,300 35	2,327 32
78	Toronto, Hamilton and Buffalo..........	89 16	110,674 38	281,782 97	5,125 30
79	Victoria and Sidney, B.C..........	16·26	9,703 01	10,281 65	401 61
80	York and Carleton. This railway has only been in operation one month..........	5·75	....	....	....
	Total..........	18,139·97	19,396,302 15	46,665,103 67	3,105,457 39

for the Year ended June 30, 1901—*Concluded.*

Other Sources.	Total Gross Earnings.	Total Net Earnings.	Proportion of Earnings to Working Expenses.	Earnings per Train Mile.	Number.	Remarks.
$ cts.	$ cts.	$ cts.	p. c.	Cts.		
8,782 82	399,660 22	40,406 61	111	108·70	44	Also 36·6 miles, Sorel to Drummondville, not in operation.
1,267 00	59,354 16	1,356 88	102	77·36	45	
250 00	188,574 28	40,214 45	127	100·67	46	
202 39	9,052 97	- 24,770 87	27	51·13	47	
262 79	86,314 82	21,364 18	133	171·53	48	Running powers on C.P.R., from Five Mile Point to Nelson, 4·70 miles.
82 44	23,600 18	5,785 03	132	59·36	49	
1,076 05	258,042 07	- 42,682 79	86	108·87	50	For 11 months only to May 31, 1901, at which date this property was leased to the Province of Manitoba.
....	33,536 55	3,194 20	111	374·71	51	
5,400 00	19,099 33	- 707 49	96	127·33	52	
....	14,764 51	860 02	106	53·52	53	
819 70	82,033 71	16,213 11	125	129·97	54	
1,116 16	75,773 74	- 11,509 56	87	66·93	55	
3,689 29	5,210 49	2,702 48	208	402·04	56	
575 54	53,510 71	8,895 18	120	114·95	57	
44 00	5,926 76	- 12,026 42	33	62·67	58	" " "
566 34	132,089 97	7,246 02	106	197·24	59	
1,536 49	588,558 57	187,590 61	147	105·20	60	Running powers on Intercolonial Railway, Harlake Junction, to Levis, 5 miles.
11,793 77	375,695 89	91,373 97	132	113·02	61	
....	....	....	......	....	..	Included in Quebec and Lake St. John for 4 months only, up to Oct. 31, 1901, for balance of year see Great Northern Ry. of Canada.
3.274 66	139,954 49	36,678 83	136	79·22	62	Running powers on Quebec and Lake St. John ; Quebec to River a'Pierre, 58·00 miles.
758 00	92,049 43	35,959 79	164	56.33	63	
187 50	72,293 57	- 50,086 39	59	59·44	64	Running powers on South Shore, St. Robert Junction to Sorel, 6 miles.
1,176 71	103,679 69	45,595 42	178	470·25	65	
....	....	....	......	....	66	
175 75	25,325 46	691 15	103	101·64	67	
23 00	32,499 99	- 29,547 62	52	53·21	68	
325 00	72,478 83	10,664 00	117	86·64	69	
15 00	211,843 01	113,897 21	216	....	70	*New locomotives. The earnings of the Company are from rents and tolls on vehicles hauled through the tunnel.
400 57	188,576 59	103,569 21	222	98·44	71	Running powers on Grand Trunk 13·20 miles, and on C. P. R. 8·70 miles.
31 62	3,803 92	444 00	113	26·32	72	
131,775 93	685,746 52	249,019 67	157	161·66	73	
5,459 73	62,618 39	18,812 53	143	79·08	74	
8,395 97	95,902 21	2,270 34	102	111·87	75	
....	13,595 65	5,548 65	169	33·99	76	
2,063 35	23,293 44	9,130 03	164	92·87	77	
35,871 80	433,454 45	156,081 79	156	153·75	78	Running powers on Hamilton and Dundas St. Railway, Hamilton to Dundas, 3·67 miles.
....	20,386 27	153 74	101	84·07	79	
....	....	- 600 00	....	....	80	
3,731,885 92	72,898,749 13	22,530,022 91	144·73	136·64		

No. 7.—Summary Statement of Operating

Number.	Name of Railway.		Mileage.	Maintenance of Line, Buildings, &c.	Working and Repairs of Engines.
				$ cts.	$ cts.
1	Alberta Railway and Coal Co.		64·62	33,458 82	17,481 52
2	Albert Southern				
	Harvey Branch				
3	Algoma Central and Hudson Bay		42·00	1,565 58	16,425 37
4	Atlantic and Lake Superior, comprising—				
	Baie des Chaleurs, 98 miles		98·00	11,933 47	13,302 41
	Great Eastern, 23 miles not under traffic				
	Ottawa Valley, 7 " "				
5	Bay of Quinté Railway and Navigation Co.	4·00	64·82	31,629 43	33,374 03
	Kingston, Napanee and Western	60·82			
6	Bedlington and Nelson		15·20	6,460 87	5,488 99
7	British Yukon		90·45	122,140 21	49,171 75
8	Brockville, Westport and Sault Ste. Marie		45·00	8,445 92	12,066 13
9	Buctouche and Moncton		32·00	6,542 04	5,966 91
10	Calgary and Edmonton		295·93	109,366 13	55,829 09
11	Canada Atlantic, including Ottawa, Arnprior and Parry Sound	400·00	458·00	250,491 62	562,512 33
	Leased: Central Counties	37·00			
	Pembroke Southern	21·00			
12	Canada Coals and Railway Co., formerly Joggins		12·00	4,640 84	5,238 17
13	Canada Eastern		156·00	42,384 16	50,581 49
14	Canada Southern		382·19	937,498 58	1,363,833 63
15	Canadian Northern, comprising—				
	Lake Manitoba Railway and Canal Co.'s Line		522·00	67,444 25	73,306 40
	Winnipeg Great Northern Ry.				
	Manitoba South Eastern				
	Ontario and Rainy River				
	Port Arthur, Duluth and Western				
16	Canadian Government Railways—				
	Intercolonial		1,301·94	1,151,263 65	1,970,987 70
	Prince Edward Island		209·00	96,213 25	73,813 90
17	Canadian Pacific Railway, owned	4,554·20	7,290·80	4,072,210 52	5,603,356 68
	Leased lines—				
	Fredericton	22·10			
	New Brunswick	175·00			
	New Brunswick and Canada	117·20			
	St. John and Maine	92·10			
	St. John Bridge and Railway Extension	2·00			
	St. Stephen and Milltown	4·60			
	Tobique Valley	28·00			
	Cap de la Madeleine	3·00			
	Montreal and Lake Maskinongé	11·00			
	Atlantic and North-west	201·40			
	Montreal and Ottawa	93·20			
	Ontario and Quebec	474·50			
	St. Lawrence and Ottawa	58·40			
	Credit Valley	175·70			
	Guelph Junction	15·00			
	Toronto, Grey and Bruce	191·10			
	West Ontario Pacific	26·60			
	Manitoba and North-western	252·60			
	Manitoba South-western Colonization	214·40			
	Columbia and Kootenay	60·50			
	Nakusp and Slocan	36·30			
	Shuswap and Okanagan	50·80			
	Columbia and Western	157·90			
	Great North-west Central	71·00			
	British Columbia Southern	202·20			
18	Caraquet		68·00	8,322 72	10,960 23
19	Carillon and Grenville		13·00	1,660 00	1,575 00
20	Central Ontario	125·00	134·60	31,646 84	38,229 93
	Ontario Belmont and Northern	9·60			

Expenses for the Year ended June 30, 1901.

Working and Repairs of Cars.	General Operating Expenses.	Total..	Cost of operating per train mile.	Number.	Remarks
$ cts.	$ cts.	$ cts.	Cents.		
4,386 04	51,418 35	106,744 73	151·56	1	
....	....	....	....	2	No return. Not in operation.
5,683 04	38,197 12	61,871 11	203·49	3	
....	7,855 99	33,091 87	50·91	4	
10,260 00	30,020 01	105,283 47	78·54	5	
777 21	14,448 37	27,175 44	149·22	6	Running power on C.P.R., Creston Jct. to Sirdar Jct., 8·70 miles.
9,061 18	103,157 41	283,530 55	303·76	7	
3,162 35	8,421 47	32,095 87	95·84	8	
572 66	5,651 45	18,733 06	101·63	9	
9,642 31	52,695 29	227,532 82	103·65	10	Operated by C. P. R.
116,033 90	482,395 19	1,411,433 04	92·07	11	
1,143 38	2,065 02	13,087 41	37·11	12	
4,544 61	24,272 65	121,782 91	62·95	13	
383,311 62	2,095,209 88	4,779,853 71	120·61	14	
20,085 67	61,075 36	221,911 68	105·34	15	Also leased lines Northern Pacific and Manitoba and Portage and Northwestern for month of June, 1901; for mileage see Nos. 50, 58. Running powers over the Manitoba and North-western, 36 miles from Portage la Prairie to Gladstone Jct.
745,773 59	1,592,397 70	5,460,422 64	87·19	16	Running powers on Grand Trunk— Pt. Lévis to Hadlow .... 1·50 Chaudière Curve to Chaudière 1·18 Ste. Rosalie Jct. to Montreal..37·62 40·30
16,844 84	74,894 25	261,766 24	96·86		
1,439,087 43	7,136,766 08	18,251,420 71	103·29	17	Also running power on— Grand Trunk Ry., Toronto to Hamilton Jct.... ... .36·20 Toronto, Hamilton and Buffalo Ry., Hamilton Jct. to Hamilton.... .... 2·70 Canada Atlantic Ry., Montreal and Ottawa Jct. to Ottawa........ .... ·80 39·70
825 00	7,110 97	27,218 92	57·91	18	
250 00	13 79	3,498 79	53 83	19	
9,357 75	27,133 56	106,368 08	86·48	20	

No. 7.—Summary Statement of Operating

Number.	Name of Railway.			Mileage.	Maintenance of Line, Buildings, &c.	Working and Repairs of Engines.
					$ cts.	$ cts.
21	Central of New Brunswick			45·66	29,420 75	2,620 71
22	Central of Nova Scotia, formerly Nova Scotia Central			74·00	17,933 43	13,711 88
23	Cumberland Railway and Coal Co.'s line			32·00	20,175 90	18,367 54
24	Dominion Atlantic, comprising—			220·50	139,134 99	282,893 58
	Windsor and Annapolis		87·50			
	Cornwallis Valley		14·00			
	Yarmouth and Annapolis		87·00			
	Windsor Branch, Intercolonial		32·00			
25	Elgin and Havelock			28·00	4,275 86	3,602 65
26	Esquimalt and Nanaimo			78·00	60,437 72	52,476 28
27	Fredericton & St. Mary's Railway Bridge Co.			1·33	1,176 83	....
28	Grand Trunk	880·35	883·79	3,138·98	2,856,710 03	4,726,928 67
	Wharf Branch, Montreal	3·44				
	Great Western		561·80			
	Brantford, Norfolk and Port Burwell		34·39			
	Buffalo and Lake Huron		162·00			
	Grand Trunk, Georgian Bay and Lake Erie		171·00			
	Owen Sound Branch		12·42			
	London, Huron and Bruce		68·00			
	Waterloo Junction		10·25			
	South Norfolk		17·00			
	Wellington, Grey and Bruce		168·13			
	Northern		172·10			
	North Simcoe		33·00			
	Hamilton and North-western		172·00			
	Northern Pacific Junction		111·37			
	Toronto Belt Line		12·79			
	Midland		166·00			
	Grand Junction		85·21			
	Toronto and Nipissing		85·00			
	Lake Simcoe Junction		26·00			
	Victoria		53 00			
	Whitby, Port Perry and Lindsay		46·00			
	Jacques Cartier Union		6·50			
	Montreal and Champlain Junction		61·73			
	Beauharnois Junction		19·50			
29	Gulf Shore			16·78	599 45	359 00
30	Halifax and Yarmouth, formerly Coast Line of Nova Scotia			30·80	6,160 65	11,309 90
31	Hampton and St. Martin's			29·00	5,327 38	3,309 91
32	Hereford			53·30	23,779 83	24,651 96
33	Inverness and Richmond			56·50	....	....
34	Irondale, Bancroft and Ottawa			48·00	6,517 31	5,356 38
35	Kaslo and Slocan			31·80	14,544 38	10,043 32
36	Kent Northern, including St. Louis and Richibucto			34·00	3,170 00	3,010 00
37	Kingston and Pembroke			112·85	35,615 84	42,006 32
38	L'Assomption			3·33	480 60	781 00
39	Lake Erie and Detroit River, including Erie and Huron		155·72	179·72	63,180 15	110,926 75
	Leased London and Port Stanley		24·00			
40	Lenora Mount Sicker			6·25	2,300 00	3,690 00
41	Lotbinière and Mégantic			30·34	4,168 72	5,559 26
42	Massawippi Valley			35·46	33,301 59	42,493 32
43	Montfort and Gatineau Colonization			33·00	8,528 24	8,117 41
44	Montreal and Atlantic, formerly South-eastern		102·70	163·40	79,500 58	137,814 79
	Lake Champlain and St. Lawrence Junction		60·70			
45	Montreal and Province Line			40·60	11,631 50	18,204 26
46	Montreal and Vermont Junction			23·60	21,298 05	44,642 52
47	New Westminster Southern			24·10	16,151 03	6,147 33
48	Nelson and Fort Sheppard			54·70	28,402 17	16,429 28

Expenses for the Year ended June 30, 1901—*Continued.*

Working and Repairs of Cars.	General Operating Expenses.	Total.	Cost of operating per train mile.	Number.	Remarks.
$ cts.	$ cts.	$ cts.	Cents.		
305 62	6,810 36	39,157 44	412·18	21	
1,816 56	11,025 99	44,487 86	90·13	22	Running power on Dominion Atlantic, Middleton Junction to Middleton, 0·33 miles.
5,973 87	17,417 60	61,934 91	82·43	23	
16,229 12	263,235 39	701,493 08	134·81	24	Running powers over I.C.R., Halifax to Windsor Jct., 14 miles.
....	3,091 70	10,970 21	75·80	25	
9,686 95	93,565 44	216,166 39	109·82	26	
....	55 09	1,231 92	... .	27	Running powers on Canada Eastern, 0·17 miles.
1,311,869 72	4,420,622 92	13,316,131 34	80·76	28	
....	299 25	1,257 70	39·18	29	
969 58	8,787 94	27,228 07	58·95	30	Also 19·3 miles not in operation, but was in operation last year.
633 04	5,266 60	14,536 93	76·51	31	
5,652 48	13,972 33	68,056 60	104·28	32	
....	1,124 51	1,124 51	....	33	Road not open for traffic until June 15, 1901, and no separate returns for the 15 days in June are available.
871 00	6,771 48	19,516 17	64·13	34	
1,359 85	14,516 82	40,464 37	161·97	35	
450 00	3,050 00	9,680 00	53·78	36	
5,726 32	47,062 78	130,411 26	96·45	37	
35 00	364 50	1,661 10	27·03	38	
22,628 31	112,085 14	308,820 35	81·31	39	
150 00	2,864 39	9,004 39	178·66	40	
840 30	2,789 28	13,357 56	76·31	41	
8,129 84	26,214 19	110,138 94	71·75	42	Running powers on G.T.R. from Lennoxville to Sherbrooke, 2·95 miles.
.. . .	5,913 54	22,559 19	43·19	43	
20,425 05	121,513 19	359,253 61	97·71	44	Also 36·6 miles, Sorel to Drummondville not in operation.
8,091 89	20,069 63	57,997 28	75·59	45	
33,515 84	48,903 42	148,359 83	79·20	46	
724 32	10,801 16	33,823 84	191·03	47	
2,419 48	17,699 71	64,950 64	129·08	48	Running powers on C.P.R. from Five Mile Point to Nelson, 4·70 miles.

No. 7.—SUMMARY STATEMENT of Operating

Number.	Name of Railway.	Mileage.	Maintenance of Line, Buildings, &c.	Working and Repairs of Engines.
			$ cts.	$ cts.
49	New Brunswick and Prince Edward Island.	36·00	6,696 59	7,135 94
50	Northern Pacific and Manitoba	320·51	94,924 67	81,765 49
51	Nosbonsing and Nipissing	5·50	*9,835 00	1,810 00
52	Nova Scotia Steel Co.'s Railway	12·50	5,166 65	9,820 17
53	Orford Mountain	26·50	5,074 87	4,887 50
54	Ottawa, Northern and Western	57·87	16,316 59	17,209 75
55	Ottawa and New York	56·79	18,336 81	23,775 30
56	Philipsburg Railway and Quarry Co.	7·50	1,024 44	316 37
57	Pontiac Pacific Junction	70·60	15,594 59	11,849 67
58	Portage and North-western	35·07	6,851 08	2,313 85
59	Qu'Appelle, Long Lake and Saskatchewan	253·96	74,723 49	30,361 14
60	Quebec Central	213·50	105,563 15	126,849 13
61	Quebec and Lake St. John	242·00	55,399 03	108,428 60
	Great Northern, St. Tite to St. Boniface. ... 20·00 Lower Laurentian, Riv. à Pierre to St. Tite. ... 35·00	...	...	...
62	Great Northern Railway of Canada, including Lower Laurentian (for 8 months only, ending June 30, 1901, previous 4 months included in Quebec and Lake St. John)	175·10	25,846 24	44,825 01
63	Quebec, Montmorency and Charlevoix	30·00	11,568 43	16,408 54
64	Quebec Southern, including United Counties and East Richelieu Valley	83·80	16,221 43	21,636 55
65	Red Mountain	9·53	10,119 76	27,118 67
66	Rutland and Noyan—operated by Rutland Ry. as a connection with Canadian Rys	5·00	...	...
67	Salisbury and Harvey	45·00	11,572 35	7,928 28
68	Shore Line of New Brunswick	82·50	33,703 91	14,333 80
69	Stanstead, Shefford and Chambly	43·00	17,485 65	18,753 09
70	St. Clair Tunnel	2·23	2,992 31	64,089 49
71	St. Lawrence and Adirondack	33·00	25,461 37	26,480 60
72	St. Mary's River	30·00	1,119 12	689 15
73	Sydney and Louisburg—Dominion Coal Co.'s line	48·96	42,222 16	101,123 72
74	South Shore, formerly Montreal and Sorel	61·50	9,540 52	15,504 87
75	Temiscouata	113·00	30,721 32	25,941 99
76	Tilsonburg, Lake Erie and Pacific	20·00	1,677 00	3,415 00
77	Thousand Islands	6·33	2,088 63	4,257 17
78	Toronto, Hamilton and Buffalo	89·16	43,444 05	82,026 06
79	Victoria and Sidney, B.C	16·26	4,867 59	7,457 32
80	York and Carleton—This railway has only been in operation one month	5·75	...	300 00
	Total	18,139·97	11,195,400 68	16,467,767 90

Expenses for the Year ended June 30, 1901—*Concluded.*

Working and Repairs of Cars.	General Operating Expenses.	Total.	Cost of operating per train mile.	Number.	Remarks.
$ cts.	$ cts.	$ cts.	Cents.		
797 14	3,185 48	17,815 15	44·81	49	
14,355 27	109,679 43	300,724 86	126·88	50	For eleven months only to May 31, 1901, at which date the property was leased to the Province of Manitoba.
2,227 00	16,470 35	30,342 35	339·02	51	*And steamers.
300 00	4,520 00	19,806 82	132·05	52	
339 21	3,602 91	13,904 49	50·40	53	
4,274 88	28,019 38	65,820 60	104·29	54	
1,990 41	43,180 78	87,283 30	77·09	55	
....	1,167 20	2,508 01	193·52	56	
3,232 56	13,938 71	44,615 53	95·84	57	
1,864 69	6,923 56	17,953 18	189·84	58	For eleven months only to May 31. 1901, at which date this property was leased to the Province of Manitoba,
3,382 11	16,377 21	124,843 96	186·42	59	
27,496 61	141,059 07	400,967 96	71·67	60	Running powers on I.C.R., Harlaka Jct. to Lévis, 5 miles.
18,756 14	101,738 15	284,321 92	85·53	61	
....	....	....	....	....	Included in Quebec and Lake St. John for 4 months only, up to Oct. 31, 1900—for balance of year see Great Northern Railway of Canada.
2,998 77	29,605 64	103,275 66	58·45	62	Running powers on Quebec and Lake St. John, Quebec to River a Pierre, 58 miles.
7,238 27	20,874 40	56,089 64	34·32	63	
1,565 15	*82,956 83	122,379 96	100·62	64	*Including extraordinary expenses, permanent improvements, equipment and betterments, &c. Running powers on South Shore, St. Robert Jct. to Sorel, 6 miles.
1,791 30	19,054 54	58,084 27	263·44	65	
....	....	....	....	66	
930 91	4,202 77	24,634 31	98·87	67	
2,038 64	11,971 26	62,047 61	101·58	68	
6,545 85	19,030 24	61,814 83	73·90	69	
774 63	30,089 37	97,945 80	....	70	
2,485 01	30,580 40	85,007 38	44·37	71	Running powers on G. T. Ry. from Valleyfield to Beauharnois, 13·20 miles, and on C.P.R. from Adirondack Jct. to Montreal, 8·70 miles.
35 80	1,515 85	3,359 92	23·24	72	
52,395 29	240,985 68	436,726 85	102·96	73	
688 44	18,072 03	43,805 86	55·32	74	
10,753 68	26,214 88	93,631 87	109·22	75	
....	2,955 00	8,047 00	20·12	76	
535 79	7,281 82	14,163 41	56·47	77	
11,081 24	140,821 31	277,372 66	98·38	78	Running powers on Hamilton and Dundas St. Ry., Hamilton to Dundas, 3·67 miles.
192 10	7,715 52	20,232 53	83·43	79	
100 00	200 00	600 00	....	80	
4,420,473 61	18,285,084 03	50,368,726 22	94·41		

No. 8.—Summary of Accidents for the

Number.	Name of Railway.	Mileage.	Passengers, Employees or Others.	Fell from Cars or Engines. Killed.	Fell from Cars or Engines. Injured.	Jumping on or off Trains or Engines when in motion. Killed.	Jumping on or off Trains or Engines when in motion. Injured.
1	Algoma Central and Hudson Bay Railway	42·00	Passengers	...	...	...	1
			Employees	...	1	...	...
			Others	...	...	...	...
2	Bedlington and Nelson	15·20	Employees	...	...	...	2
3	British Yukon	90·45	Passengers	...	...	...	1
			Employees	...	...	...	1
4	Buctouche and Moncton	32·00	Employees	...	...	1	...
5	Calgary and Edmonton	295·93	Passengers	...	1	...	...
			Employees	...	1	...	...
6	Canada Atlantic	458·00	Passengers	...	...	...	1
			Employees	...	...	1	...
			Others	...	...	...	1
7	Canada Eastern	136·00	Employees	...	...	...	...
8	Canada Southern	382·19	Passengers	...	...	...	2
			Employees	2	1	...	1
			Others	...	...	...	2
9	Canadian Government Railways—						
	Intercolonial	1,301·94	Passengers	1	...	1	1
			Employees	2	18	2	7
			Others	...	1	1	2
	Prince Edward Island	209·00	Employees	...	...	...	...
10	Canadian Northern	522·00	Employees	...	1	...	...
11	Canadian Pacific: owned and leased lines	7,292·31	Passengers	2	3	1	12
			Employees	6	46	2	30
			Others	2	5	3	12
12	Caraquet	68·00	Others	...	...	...	...
13	Central Ontario	134·60	Employees	...	...	...	...
14	Central of New Brunswick	45·66	Employees	...	...	...	...
15	Central of Nova Scotia	74·00	Employees	...	...	...	...
16	Dominion Atlantic	220·50	Employees	1	1	1	...
17	Elgin and Havelock	28·00	Passengers	...	...	...	...
18	Esquimalt and Nanaimo	78·00	Passengers	...	...	...	1
			Employees	...	...	...	...
19	Grand Trunk	3,138·98	Passengers	1	6	4	11
			Employees	6	55	...	19
			Others	2	6	5	12
20	Great Northern Railway of Canada	175·10	Employees	...	...	...	1
21	Hereford	53·30	Employees	...	1	...	1
			Others	...	...	...	...
22	Kaslo and Slocan	31·80	Others	...	...	...	...
23	Kingston and Pembroke	112·85	Employees	...	...	...	...
24	Lake Erie and Detroit River	179·72	Others	...	...	...	...
25	Manitoulin and North Shore	15·50	Employees	...	...	...	...
26	Massawippi Valley	35·46	Passengers	...	...	...	...
			Employees	...	...	...	...
			Others	...	...	...	...
27	Montreal and Atlantic	163·40	Employees	...	1	...	...
			Others	...	1	...	...
28	Montreal and Province Line	40·60	Passengers	...	...	...	...
			Employees	...	...	...	3
29	Nelson and Fort Sheppard	54·70	Employees	...	2	...	...
			Others	...	...	...	...
30	Northern Pacific and Manitoba	320·51	Passengers	...	...	...	1
			Employees	...	2	...	2
			Others	...	...	...	2
31	Ottawa and New York	56·79	Others	...	...	...	...
32	Ottawa, Northern and Western	57·87	Employees	...	...	...	...
33	Pontiac Pacific Junction	70·60	Employees	...	...	...	...
34	Portage and North-western	35·07	Others	...	...	1	...

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*14 at highway crossing. †17 at highway crossings.

Year ended June 30, 1901.

At work on or near Track making up Trains.		Putting Arms or Heads out of Wind'ws		Coupling Cars.		Collisions or by Trains thrown from Track.		Walking, standing, lying or being on Track.		Explosions.		Striking Bridges.		Other Causes.		Totals.		
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
																	1	
					5									2	10	2	16	1
								1								1	....	
																	2	2
																	1	
					3										2		6	3
																1	....	4
							1										2	
															3		4	5
																	1	
	3			1	4	1	12							1	12	4	31	6
								5	5				1		9	5	16	
		1	1													1	1	7
															1		3	
							1	1	1						5	3	9	8
								9	2							9	4	
							1									2	2	
3	24		1	1	42	3	7	3	4				1	2	24	16	128	9
								18	15						3	19	21	
					6	1									5	1	11	
1					2											1	3	10
						2	32	1	3						9	6	59	
1			1	1	125	2	23	5	8				2	4	92	21	327	11
								*67	†41					1	7	73	65	
					1												1	12
					1												1	13
						1										1	....	14
					1												1	15
				1												3	1	16
															1		1	17
						1										1	1	18
					1	3										3	1	
							16	1							13	6	46	
5	22	2		1	67	10	43	15	17				1	9	98	48	322	19
	1					3	5	35	22					20	34	65	80	
				1	5					1	1				1	2	8	20
																	2	21
									1								1	
														1		1	....	22
								1								1	....	23
								2	3							2	3	24
							1										1	25
							6										6	
					1	1	5									1	6	26
															3		3	
					4								1		3		9	27
								2	5							2	6	
															2		2	28
					1		2								1		7	
					1		8										11	29
								1	2							1	2	
																	1	
					1									1	6	1	11	30
																	2	
									1						1		2	31
					1												1	32
					1												1	33
															1	1	1	34

No. 8.—Summary of Accidents for the

Number.	Name of Railway.	Mileage.	Passengers, Employees or Others.	Fell from Cars or Engines.		Jumping on or off Trains or Engines when in motion.	
				Killed.	Injured.	Killed.	Injured.
35	Quebec Central	213·50	Passengers	....	....	1	....
			Employees	....	....	1	....
			Others	...	...	....	...
36	Quebec and Lake St. John	242·00	Employees	...	....	....	1
37	Quebec, Montmorency and Charlevoix	30·00	Employees	....	....	....	....
			Others	....	....	....	....
38	Quebec Southern	83·80	Passengers	...	...	....	..
			Employees	....	1	....	....
39	Red Mountain	9·53	Passengers	....	...	....	..
			Employees	....	1	....	....
40	Stanstead, Shefford and Chambly	43·00	Passengers	....	...	....	....
			Employees	....	2	...	....
41	St. Clair Tunnel	2·23	Employees	....	..	....	....
42	St. Lawrence and Adirondack	33·00	Employees	....	..	....	2
			Others	....	....	....	....
43	South Shore	61·50	Others	....	....	....	....
44	Sydney and Louisburg	48·96	Employees	....	..	....	....
			Others	....	....	....	...
45	Temiscouata	113·00	Employees	....	....	....	....
46	Thousand Islands	6·33	Employees	....	....	....	....
47	Toronto, Hamilton and Buffalo	89·16	Passengers	....	...	....	...
			Employees	....	1	....	2
			Others	....	...	....	....
				25	158	25	134

Note.—This Statement shows the Railways on which Accidents have occurred.

Year ended June 30, 1901—*Concluded.*

At work on or near Track making up Trains.		Putting Arms or Heads out of Wind'ws		Coupling Cars.		Collisions or by Trains thrown from Track.		Walking, standing, lying or being on Track.		Explosions.		Striking Bridges.		Other Causes.		Totals.		
Killed	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	35
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	
....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	
....	....	....	....	....	4	....	....	2	2	....	....	....	....	....	....	2	7	36
....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	37
....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	
....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	2	38
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	
....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	39
....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	4	....	6	
....	....	....	....	....	....	....	4	....	....	....	....	....	....	....	....	....	4	40
....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	1	....	5	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	....	4	41
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	3	42
....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	2	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	43
....	....	....	....	....	....	....	....	2	....	....	....	....	....	1	....	3	....	44
....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	
....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	45
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	46
....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	2	47
....	....	....	1	....	2	1	8	....	....	....	....	....	....	....	7	1	21	
....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	1	1	2	
10	50	3	4	6	284	29	178	175	136	1	1	...	6	43	366	317	1,317	

No. 9.—Lines of Railway owned by Coal and Iron Mines, for the year ended June 30, 1901.

Name.	Length of Railway.	Gauge.	No. of Engines.	No. of Wagons.	Remarks.
*Albion Mines Railway..	3·0	4·8½	2	20	*This taken from last year's return.
*Vale " "	6·00	4·8½	2	2	* " " " .
Intercolonial Coal Mining Co.........	8·00	4·8½	2	201	Connecting Drummond Colliery with the Intercolonial Railway at Westville and Granton wharf, at Middle River, Port of Pictou, Nova Scotia.
†Londonderry Iron Co. Ry	3·50	4·8½	2	17	From this Company's works at Acadia Mines to Londonderry Station, I.C.R.
" "	4·00	4·8½	...	......	From the East Mines (operated by this Co.) to East Mines Station, I.C.R.
" "	2·00	4·8½	...	......	From the Lime Quarry (operated by this Co.) to Graham's Siding, I.C.R.
" "	3·00	3·00	2	21	From the West Mines (operated by this Co.) to the works at Acadia Mines.
	29·50	....	10	261	
CAPE BRETON.					
The Nova Scotia Steel Co. of New Glasgow, N.S., formerly the General Mining Association of London, Eng.	5·15	4·8½	4	197	This railway is used for colliery purposes only. It conveys the coal from the old Sydney mines, situated in the town of Sydney Mines, Cape Breton, to the shipping port of North Sydney, and is connected with the Intercolonial Railway by a short branch line to the North Sydney Station. It does not carry the public or do any passenger traffic further than carrying the employees of the Nova Scotia Steel Company Ltd., to and from their work.
Dominion Coal Co. Ltd.—					
Sydney & Louisbourg Railway, Main Line	39·15	4·8½	20	860	This forms part of the Sydney and Louisbourg Railway, between Sydney and Louisbourg Harbours, which is included in the general statistics.
Branches: Main Line to Bridgeport Colliery..	·50	4·8½			
Branches: Main Line to Reserve Colliery....	2·12	4·8½			
Branches: Main Line to International Colliery.........	·25	4·8½			
Branches: Main Line to Hub Colliery.........	2·00	4·8½			
Branches: Main Line to Glace Bay Colliery....	·50	4·8½			
Branches: Main Line to Caledonia Colliery.......................	1 11	4·8½			
Branches: Main Line to Gowrie Colliery..........	1·50	4 8½			
Stirling Pit to Glace Bay Harbour.....	·50	4·8½			
Caledonia Colliery....................	·33	4·8½			
	48·96	......	20	860	

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† This taken from last year's return, proper return from year ending June 30, 1901, not received.

No. 10.—STATEMENT of Aid granted to Railways—Constructed and under Construction—by Governments, up to the year ended June 30, 1901.

Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
DOMINION GOVERNMENT.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts	$ cts.
Albert (now Salisbury and Harvey)	* 29,665 45					
Algoma Central and Hudson Bay			720,000 00			
Albert Southern			50,460 00			
Atlantic and North-west in Canada			a 1,422,000 00			
Baie des Chaleurs (now in Atlantic and Lake Superior)			A 716,000 00			
Belleville and North Hastings—Grand Junction (now in Grand Trunk)			21,888 00			
Beauharnois Junction			62,400 00			
Brantford, Waterloo and Lake Erie (now Toronto, Hamilton and Buffalo)			57,600 00			
Brockville, Westport and Sault Ste. Marie			105,200 00			
Buctouche and Moncton			101,600 00			
Canada Atlantic			282,355 20			
Canada Central			1,525,250 00			
Canada Eastern (formerly Northern and Western of New Brunswick)			b 374,839 84			
Canadian Northern			640,000 00			
Canadian Pacific			c56,112,213 45			
" Revelstoke to Arrow Lake			80,000 00			
" Crow's Nest Pass			3,630,000 00			
" Extension—Pipe Stone Branch			A 160,000 00			
Cap de la Madeleine			7,424 00			
Caraquet			224,000 00			
Central of New Brunswick			A 190,400 00			
Central of Nova Scotia (formally Nova Scotia Central)			235,200 00			
Central Ontario			A 67,200 00			
Coast Railway of Nova Scotia (now Halifax and Yarmouth)			A 195,200 00			
Cobourg, Northumberland and Pacific			A 160,000 00			
Columbia and Kootenay			88,800 00			
Cornwallis Valley (now in Dominion Atlantic)			44,800 00			
Cumberland Railway and Coal Company			39,850 00			
Drummond County (now in Intercolonial system)			A 423,936 00			
Dominion Lime Company (now in Hereford Ry)			15,360 00			
East Richelieu Valley (now part of Quebec Southern)			A 76,800 00			
Elgin and Havelock			d 82,652 82			

* Including $14,665.45 rails. ‡ Including $83,612.54 rails to St. Martin's and Upham Ry. *a* Payable in half-yearly instalments of $35,550 each for 20 years, commencing July 1, 1889 and also $1,386,000 as bonus in addition on the portion of this railway through the state of Maine. *b* Including $24,439.84 rails to Chatham Branch. *c* Including cost of railway lines built by Dominion Government, and transferred to Canadian Pacific Railway Company, $31,112,213.45. *d* Including $44,252.82 rails.

No. 10.—STATEMENT of Aid Granted to Railways by Governments—*Continued.*

Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
DOMINION GOVERNMENT—*Continued.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Erie and Huron (now in Lake Erie and Detroit River Ry.)			96,000 00			
Esquimalt and Nanaimo			750,000 00			
Fredericton and St. Mary's Railway and Bridge Company	300,000 00		30,000 00			
Grand Trunk	15,142,633 33					
Victoria Jubilee Bridge of Grand Trunk Ry			500,000 00			
Grand Trunk, Georgian Bay and Lake Erie, Owen Sound Branch			39,744 00			
Great Eastern (in Atlantic and Lake Superior)			40,345 00			
Great Northern (exclusive of Ottawa Valley Section)			*A* 550,911 11			
Guelph Junction			46,000 00			
Gulf Shore			*A* 53,699 20			
Hampton and St. Martin (formerly St. Martin and Upham)			‡ 83,612 54			
Harvey Branch			5,553 57			
Hereford			155,200 00			
Intercolonial			63,973,971 47			
Interprovincial Bridge—Ottawa			212,500 00			
International (Atlantic and North-west) C.P.R.			156,800 00			
Inverness and Richmond			*A* 313,600 00			
Irondale, Bancroft and Ottawa			160,000 00			
Joggins (now Canada Coals and Railway Co.)			37,500 00			
Kent Northern	‡ 58,334 27					
Kingston, Napanee and Western (now in Bay of Quinté)			208,732 80			
Kingston and Pembroke			48,000 00			
L'Assomption			11,200 00			
Lake Erie and Detroit River			338,731 00			
Lake Temiscamingue Colonization			310,335 95			
Leamington and St. Clair (now in Canada Southern)			51,200 00			
Lotbinière and Megantic			96,000 00			
Lower Laurentian (now in Great Northern)			217,600 00			
Massawippi Valley			5,376 00			
Midland of Nova Scotia			*A* 219,350 00			
Montfort and Gatineau Colonization			167,440 00			
Montreal and Lake Maskinongé			41,280 00			
Montreal and Champlain Junction			103,600 00			
Montreal and Ottawa			192,000 00			
Montreal and Province Line (formerly Montreal Portland & Boston)			*A* 60,800 00			
Montreal and Western			361,270 00			

Nakusp and Slocan			117,760 00		
New Brunswick and Prince Edward Island			113,440 00‡		
New Glasgow Iron and Coal Co. (now Nova Scotia Steel Co.)			39,840 00		
Northern and Pacific Junction			1,320,000 00		
Nova Scotia Southern			A 310,400 00		
Ontario, Belmont and Northern (leased to Central Ontario)			30,720 00		
Ontario and Quebec			196,000 00		
Ontario and Rainy River (now in Can. Northern)			A 1,632,000 00		
Orford Mountain			84,800 00		
Ottawa, Arnprior and Parry Sound & Parry Sound Colonization			A 932,512 00		
Ottawa and Gatineau (now Ottawa Northern and Western)			A 384,000 00		
Ottawa and New York			A 262,384 00		
Ottawa Valley (formerly part of Great Northern) now in Atlantic and Lake Superior			21.600 00		
Pembroke Southern			64,000 00		
Philipsburg Railway and Quarry Co			A 23,712 00		
Pontiac Pacific Junction			A 331,850 00		
Pontiac and Renfrew			13,600 00		
Port Arthur, Duluth and Western (now in Can. Northern)			271,200 00		
Prince Edward Island			4,123,827 21		
Quebec Bridge and approaches			1,000,000 00		
Quebec and Lake St. John			1,006,743 50		
Quebec Central			348,342 00		
Quebec, Montmorency and Charlevoix			96,000 00		
Quebec, Montreal, Ottawa and Occidental, North Shore, Montreal to Quebec			†954,000 00		
" " " "			1,500,000 00		
" " Montreal to Ottawa			†1,440,000 00		
Restigouche and Western			A 78,930 00		
St. Louis and Richibucto			22,400 00		
St. John Bridge and Railway Extension	433,900 00				
St. Lawrence and Adirondack			A 149,481 60		
St. Mary's River Railway			75,000 00		
St. Clair Tunnel			375,000 00		
St. Stephen and Milltown			A 14,848 00		
Shuswap and Okanagan			163,200 00		
South Norfolk			54,400 00		
South Shore (formerly Montreal and Sorel)			444,357 57		
Sydney and Louisbourg—Dominion Coal Co			87,808 00		
Témiscouata			645,950 00		
Thousand Islands			24,400 00		
Tilsonburg, Lake Erie and Pacific			A 69,271 48		
Tobique Valley			134,016 00		
Toronto, Grey and Bruce			14,656 00		
United Counties (now part of Quebec Southern)			A 208,000 00		
Waterloo Junction			32,800 00		

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† Dominion Government pays to Quebec Government 5 per cent interest per annum on these two amounts.

A See note on page No. 21.

‡ Rails, $58,334.27.

No. 10.—STATEMENT of Aid granted to Railways by Governments—*Continued.*

Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
DOMINION GOVERNMENT—*Concluded.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
West Ontario Pacific			60,000 00			
Western Counties or Yarmouth and Annapolis (now in Dominion Atlantic)			500,000 00			
Windsor and Annapolis (now in Dominion Atlantic)			1,193,369 00			
York and Carleton			A 18,336 00			
		15,964,533 05		158,536,736 31		
ONTARIO GOVERNMENT.						
Brantford, Norfolk and Port Burwell, Grand Trunk			68,000 00			
Canada Atlantic			270,000 00			
Canada Central			1,479,000 00			
Canada Southern			147,859 00			
Central Ontario			189,500 00			
Cobourg, Blairton and Marmora	26,000 00		18,740 00			
Credit Valley			531,000 00			
Erie and Huron (now in Lake Erie and Detroit River Ry.)			83,000 00			
Grand Junction and Belleville and North Hastings			224,660 00			
Grand Trunk, Georgian Bay and Lake Erie			336,000 00			
Hamilton and North-western			565,020 00			
Irondale, Bancroft and Ottawa			165,000 00			
Kingston and Pembroke			456,493 00			
Kingston, Napanee and Western (now in Bay of Quinté)			90,000 00			
London, Huron and Bruce			178,630 00			
Midland Ontario			168,350 00			
Montreal and Ottawa			100,000 00			
Northern			196,188 00			
North Simcoe			83,300 00			
Ontario, Belmont and Northern (leased to Central Ontario)			19,149 39			
Ontario and Rainy River (now in Canadian Northern)			1,120,000 00			
Ottawa, Arnprior and Parry Sound			434,076 06			
Ottawa and New York			35,000 00			
Parry Sound Colonization			143,250 00			
Pembroke Southern			55,500 00			
Port Arthur, Duluth and Western (now in Canadian Northern)			255,571 00			
Tilsonburg, Lake Erie and Pacific			38,564 00			
Toronto and Nipissing			105,212 00			
Lake Simcoe Junction			53,000 00			
Toronto, Grey and Bruce			375,282 00			

Victoria			312,000 00	
Wellington, Grey and Bruce			241,276 00	
Whitby, Port Perry and Lindsay			94,957 59	
Interprovincial Bridge at Ottawa			50,000 00	
		26,000 00		8,683,578 04
QUEBEC GOVERNMENT.				
Baie des Chaleurs (now in Atlantic and Lake Superior)			1,415,000 00	
Beauharnois Junction			179,073 00	
Canada Atlantic			192,000 00	
Great Eastern (now in Atlantic and Lake Superior)			156,000 00	
Great Northern (including Lower Laurentian)			1,025,733 66	
Drummond County (now in Intercolonial Ry.)			347,420 54	
East Richelieu Valley (now part of Quebec Southern)			115,215 00	
Hereford (including Dominion Lime Coy's Line)			60,500 00	
International (now Atlantic and North-west—C.P.R.)			391,122 02	
Lake Champlain and St. Lawrence Junction			250,280 00	
Lake Témiscamingue Colonization Railway			350,076 82	
L'Assomption			5,512 50	
Lotbinière and Mégantic			126,994 00	
Missisquoi Valley (now Atlantic and North-west—C.P.R.)			228,000 00	
Montfort and Gatineau Colonization			168,395 80	
Montreal and Champlain Junction			150,000 00	
Montreal and Ottawa			182,210 00	
Montreal, Portland and Boston (now Montreal and Province Line)			231,122 00	
Montreal and Sorel (now South Shore)			276,645 00	
Montreal and Western			472,500 00	
Montreal and Lake Maskinongé			87,750 00	
Orford Mountain			98,884 92	
Ottawa and Gatineau (now Ottawa Northern and Western)			796,520 00	
Ottawa Valley (now in Atlantic and Lake Superior)			25,390 00	
Philipsburg Ry. and Quarry Co			25,667 00	
Pontiac Pacific Junction			536,000 00	
Pontiac and Renfrew			17,433 60	
Quebec Bridge			250,000 00	
Quebec and Lake St. John			2,533,000 00	
Quebec Central			1,076,123 14	
Quebec, Montreal, Ottawa and Occidental, including North Shore	3,722,956 00		727,000 00	
Quebec, Montmorency and Charlevoix			306,945 50	
South-eastern (now Montreal and Atlantic)			444,000 00	
St. Lawrence and Adirondack			65,216 00	
Témiscouata			362,250 00	
United Counties (now part of Quebec Southern)			210,000 00	
Waterloo and Magog (now in Atlantic and North-west—C.P.R.)			92,000 00	
		3,722,956 00		13,977,980 50

A See note on page No. 21.

No. 10.—STATEMENT of Aid granted to Railways by Governments—*Continued.*

Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
NEW BRUNSWICK GOVERNMENT.						
Albert (now Salisbury and Harvey)			455,000 00			
Albert Southern			48,680 00			
Buctouche and Moncton			96,000 00			
Caraquet			180,000 00			
Central of New Brunswick			139,000 00			
Fredericton			230,000 00			
Grand Southern (now Shore Line)			413,000 00			
Gulf Shore			41,950 00			
Harvey Branch			9,000 00			
Kent Northern			135,000 00			
New Brunswick			76,000 00			
New Brunswick and Canada			575,000 00			
New Brunswick and Prince Edward Island			99,708 90			
Northern and Western (now Canada Eastern)			400,000 00			
Elgin, Petitcodiac and Havelock (now Elgin and Havelock)			107,500 00			
Restigouche and Western			23,000 00			
St. Martin and Upham (now Hampton and St. Martin)			145,600 00			
St. John Bridge and Railway Extension			5,181 81			
St. John and Maine			880,000 00		300,000 00	
St. Louis and Richibucto			21,000 00			
St. Stephen and Milltown			13,920 00			
Témiscouata			66,000 00			
Tobique Valley			70,000 00			
York and Carleton			13,899 00			
				4,244,439 71		300,000 00
NOVA SCOTIA GOVERNMENT.						
Coast Line (now Halifax and Yarmouth)			288,000 00			
Cornwallis Valley (now in Dominion Atlantic)			44,800 00			
Canada Coal and Railway Co. Line (formerly Joggins)			35,200 00			
Inverness and Richmond			272,000 00			
Midland Ry. of Nova Scotia (formerly Stewiacke Valley and Lansdowne)			192,000 00			
New Glasgow Iron, Coal and Railway Co. (now Nova Scotia Steel Co.)			40,000 00			
Nova Scotia Central (now Central Railway of Nova Scotia)			432,261 08			
Nova Scotia Southern			374,400 00			
Springhill and Parrsboro' (Cumberland Railway and Coal Co.)			173,650 00			

Sydney and Louisburg, Dominion Coal Co.			87,808 00			
Western Counties, Yarmouth and Annapolis (now in Dominion Atlantic).			679,197 45	2,619,316 53		
MANITOBA GOVERNMENT.						
Canadian Pacific			300,377 50			
Manitoba South-western Colonization.	900,000 00					
Northern Pacific and Manitoba			641,575 25			
		900.000 00		941,952 75		
BRITISH COLUMBIA GOVERNMENT.						
Canadian Pacific.			37,500 00	37,500 00		
Total aid granted by Governments		20,613,489 05		189,041,503 84		300,000 00

NOTE.—For Statement of payments of Government Aid granted to Railways, see No. 1 Summary Statement of Capital.

No. 10.—STATEMENT of Aid granted to Railways—Constructed and under Construction—by Municipalities, June 30, 1901.

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription in Shares or Bonds.	Total.
ONTARIO.		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Deseronto	Bay of Quinté Ry				30,000 00		
Town of Napanee	Kingston, Napanee and Western			30,000 00			
Village of Newburgh	" "			7,500,00			
Township of Camden	" "			30,000 00			
" Sheffield	" "			15,000 00			
" Loughborough	" "			5,000 00			
City of Kingston	" "			75,000 00	162,500 00		
Town of Brockville	Brockville, Westport and Sault Ste. Marie			36,000 00			
Elizabethtown	" "			7,000 00			
Rear of Yonge and Escott	" "			15,000 00			
" Leeds and Lansdowne	" "			5,000 00			
Bastard and Burgess	" "			28,000 00			
South Crosby	" "			6,000 00			
Village of Newboro'	" "			4,000 00			
North Crosby	" "			15,000 00	116,000 00		
Various municipalities	Buffalo and Lake Huron				966,000 00		
Renfrew	Canada Central, now Can. Pacific					30,000 00	
Horton	"					7,500 00	
Admaston	"					5,000 00	42,500 00
County of Elgin	Canada Southern			200,000 00			
Township of Townsend	"			30,000 00			
" Dereham	"			15,000 00			
" Anderdon	"			15,000 00			
Town of St. Thomas	"			25,000 00			
Township of Malden	"			15,000 00			
Town of Amherstburg	"			15,000 00			
South Norwich	"			7,500 00	322,500 00		
Sault Ste. Marie	Canadian Pacific			20.000 00			
Carleton Place	"			20,000 00			
Owen Sound	"			40,000 00	80,000 00		
Northumberland and Durham	Cobourg, Blairton and Marmora				113,500 00		
West Hawkesbury	Central Counties			15 000 00			

Vankleek Hill	"			1,200 00			
Dalkeith	"			800 00			
Rockland	"			6,000 00			
Clarence	"			1,000 00	24,000 00		
Town of Trenton	Central Ontario			10,000 00			
Wellington Village	"			2.500 00			
Town of Picton	"			21,000 00			
County of Prince Edward	"			60,000 00	93.500 00		
Town of Cobourg	Cobourg, Northumberland & Pacific			30,000 00			
Village of Campbellford	" "			15,000 00			
Township of Percy	" "			25,000 00			
" Haldimand	" "			14,000 00			
" Brighton	" "			2,000 00			
" Hamilton	" "			4,500 00			
" Cramahe	" "			3,000 00	93,500 00		
County of Oxford	Credit Valley			200,000 00			
" Wellington	"			135,000 00			
" Waterloo	"			110,000 00			
" Peel	"			75,000 00			
" Halton	"			70,000 00			
City of Toronto	"			350,000 00			
" St. Thomas	"			50,000 00			
Town of Milton	"			30,000 00			
" Brampton	"			20,000 00			
" Ingersoll	"			10,000 00			
" Orangeville	"			15,000 00			
Village of Streetsville	"			20,000 00	1,085,000 00		
County of Kent	Erie and Huron, now in Lake Erie and Detroit			155,000 00			
City of Chatham	"			30,000 00			
Town of Sarnia	"			16,000 00			
Village of Dresden	"			20,500 00			
" Blenheim	"			11,000 00			
" Wallaceburg	"			11,000 00			
Township of Sombra	"			14,000 00	257,500 00		
" Woodhouse	Grand Trunk, Georgian Bay and Lake Erie			15,000 00			
Town of Simcoe	" "			10,000 00			
Township of South Norwich	" "			10,000 00			
do North "	" "			40,000 00			
Town of Woodstock	" "						
Township of East Oxford	" "			25,000 00			
" Woodstock	" "			25,000 00			
Town of Woodstock	" "			60,000 00			
" Stratford	" "						
County of Perth	" "			120,000 00			

No. 10.—STATEMENT of Aid granted to Railways by Municipalities—*Continued.*

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
ONTARIO—*Continued.*		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Township of Mornington	Grand Trunk, Georgian Bay and Lake Erie			40,000 00			
Township of Elma	" "			10,000 00			
Town of Listowel	" "			15,000 00			
Township of Wallace	" "			10,000 00			
Town of Palmerston	" "			30,000 00			
Township of Minto	" "			25,000 00			
Town of Harriston	" "			20,000 00			
Township of Normanby	" "			80,000 00			
Township of Bentinck	" "			65,000 00			
" Brant	" "			20,000 00			
" Elderslie	" "			45,000 00			
" Arran	" "			45,000 00			
" Amabel	" "			43,000 00			
" Keppel	" "			32,000 00			
" Albemarle	" "			10,000 00			
Town of Mount Forest	" "			22,000 00			
Township of Egremont	" "			60,000 00			
Township of Glenelg	" "			20,000 00			
Town of Durham	" "			32,000 00	929,000 00		
Town of Owen Sound	Grand Trunk, Owen Sound Branch.			75,000 00			
Township of Sarawak	" "			7,500 00			
" Keppel	" "			3,000 00	85,500 00		
City of Belleville	Grand Junction and Belleville			150,000 00			
Village of Sterling	" & N. Hastings Ry.			5,000 00			
Township of Rawdon	"			15,000 00			
" Seymour	"			35,000 00			
" Percy	"			8,000 00		50,000 00	
" Asphodel	"				213,000 00		50,000 00
City of Guelph	Guelph Junc. leased to Can. Pac. R.					193,000 00	193,000 00
County of Frontenac	Kingston and Pembroke			170,000 00			
City of Kingston	" "			318,000 00			
Village of Renfrew	" "			3,000 00	491,000 00		

City of Hamilton	Hamilton and North-western			99,733 00			
Village of Georgetown	" "			11,289 00			
County of Peel	" "			30,974 00			
" Simcoe	" "			354,007 00			
Town of Collingwood	" "			12,084 00			
Township of Innisfil	" "			22,592 00			
" Woodhouse	" "			20,740 00			
" Adjala	" "			2,500 00			
" Essa	" "			2,500 00			
" Tossoronto	" "			10,000 00			
" Mulmur	" "			5,000 00			
Village of Alliston	" "			8,000 00			
Township of Nottawasaga	" "			20,386 00			
					599,805 00		
Interprovincial Bridge at Ottawa	City of Ottawa				150,000 00		
Township of South Colchester	Lake Erie and Detroit River			20,000 00			
" Gosfield	" "			15,000 00			
Village of Kingsville	" "			10,000 00			
Township of Romney	" "			10,000 00			
" East Tilbury	" "			5,000 00			
" Raleigh	" "			10,000 00			
Village of Blenheim	" "			5,000 00			
" Ridgetown	" "			12,500 00			
					87,500 00		
Township of East Gwillimbury	Lake Simcoe Junction (in Grand Trunk system)			45,000 00			
" North "	" "			20,000 00			
" Georgina	" "			20,000 00			
" Whitchurch	" "			15,000 00			
					100,000 00		
Village of Leamington	Leamington and St. Clair, in Canada Southern			12,000 00			
Township of Mersea	" "			15,000 00			
Village of Comber	" "			6,000 00			
					33,000 00		
Township of London	London, Huron and Bruce (now in Grand Trunk system)			15,000 00			
" Stephen	" "			17,500 00			
" Osborne	" "			25,000 00			
" Hay	" "			15,000 00			
" Goderich	" "			15,000 00			
" East Wawanosh	" "			25,000 00			
" Hallet	" "			25,000 00			
" Tuckersmith	" "			10,000 00			
" Turnberry	" "			5,000 00			
" Morris	" "			10,000 00			
" Stanley	" "			10,000 00			
Village of Clinton	" "			20,000 00			
" Exeter	" "			10,000 00			

No. 10.—Statement of Aid granted to Railways by Municipalities—*Continued.*

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
ONTARIO—*Continued.*		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Village of Kincardine " Wigan	London, Huron and Bruce			9,000 00			
City of London	" "			100,000 00	311,500 00		
Municipalities	London and Port Stanley (leased to Lake Erie and Detroit river Ry.).		680,311 00				
County of Elgin	" "					80,000 00	
" Middlesex	" "					100,000 00	
City of London	" "					200,000 00	
" St. Thomas	" "					34,000 00	414,000 00
Township of Thorah	Midland (now in Grand Trunk system).			50,000 00			
Town of Port Hope	"			30,000 00			
Townships of Orillia and Matchedash	"			12,500 00			
Town of Orillia	"			12,500 00			
Township of Tay	"			21,370 85			
Village of Omemee	"			2,000 00			
Township of Mara	"			12,500 00			
Town of Peterborough	"			4,000 00	144,870 85		
City of Toronto	Northern (now in Grand Trunk System).			100,000 00		190,000 00	
County of Simcoe	"					200,000 00	
Town of Barrie	"			30,000 00			
" Orillia	"			12,500 00			
Townships of Collingwood, Euphrasia and St. Vincent	"			99,480 00	241,980 00		390,000 00
Town of Smith's Falls	Ontario and Quebec (in Can. Pacific system).			25,000 00			
" Merrickville	"			10,000 00			
Township of West Winchester	"			15,000 00			
" Thamesford	"			2,500 00	52,500 00		
City of Ottawa	Ottawa, Arnprior and Parry Sound (now Canada Atlantic).			150,000 00			
Township of Huntley	" "			2,900 00			

" Hagarty	" "					2,000 00	
Town of Arnprior	" "					30,000 00	
					152,900 00		32,000 00
Town of Pembroke	Pembroke Southern				20,000 00		
Port Arthur	Port Arthur, Duluth and Western (now in Canadian Northern).			25,000 00			
Municipality of Neebing	" "			15,000 00			
					40,000 00		
Township of Russell	Ottawa and New York			10,000 00			
City of Ottawa				75,000 00			
					85,000 00		
Town of Simcoe	South Norfolk (in Grand Trunk system).			5,000 00			
Township of Charlotteville	"			20,000 00			
" South Walsingham	"			40,000 00			
					65,000 00		
City of Ottawa	St. Lawrence and Ottawa	200,000 00				60,000 00	
Town of Prescott	" "	100,000 00				30,000 00	
			300,000 00				90,000 00
" Gananoque	Thousand Islands				10,000 00		
Township of Bayham	Tilsonburg, Lake Erie and Pacific			35,000 00			
" Malahide	" "			4,000 00			
" Houghton	" "			3,000 00			
Town of Tilsonburg	" "			10,000 00			
Village of Vienna	" "			3,000 00			
					55,000 00		
City of Toronto	Toronto and Nipissing (in Grand Trunk system).			150,000 00			
Township of Scarboro'	" "			10,000 00			
" Markham	" "			30,000 00			
" Uxbridge	" "			50,000 00			
" Scott	" "			10,000 00			
" Brock	" "			50,000 00			
" Eldon	" "			44,000 00			
" Bexley	" "			15,000 00			
" Somerville	" "			15,000 00			
Townships of Luxton, Digby and Langford	" "			12,500 00			
Town of Uxbridge	" "			2,000 00			
					*376,702 59		
Township of Albion	Toronto, Grey and Bruce (in Can. Pac. system).			40,000 00			
" Caledon	" "			45,000 00			
" Mono	" "			45,000 00			
" Amaranth	" "			30,000 00			
" Arthur	" "			35,000 00			
Town of Orangeville	" "			15,000 00			
" Mount Forest	" "			20,000 00			

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* Amount returned has realized, balance has lapsed, see return of 1875.

No. 10.—STATEMENT of Aid granted to Railways by Municipalities—*Continued.*

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscriptions to Shares or Bonds.	Total.
ONTARIO—*Con.*		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
City of Toronto	Toronto, Grey and Bruce			350,000 00			
County of Grey (Group)	" "			300,000 00			
Town of Owen Sound	" "			5,000 00			
Township of Minto	" "			15,000 00			
" Howick	" "			35,000 00			
Townships of Gorrie and Wroxeter	" "			5,000 00			
Village of Teeswater	" "			5,000 00			
Township of Culross	" "			38,000 00			
" Turnbury	" "			5,000 00	988,000 00		
City of Brantford	Toronto, Hamilton and Buffalo, comprising Brantford, Waterloo and Lake Erie			25,000 00			
Township of Oakland	" "			9,000 00			
" Waterford	" "			5,000 00			
City of Hamilton	" "			225,000 00			
Township of South Grimsby	" "			4,000 00	268,000 00		
Town of Lindsay	Victoria (in Grand Trunk system).			85,000 00			
Village of Fenelon Falls	"			25,000 00			
Townships of Verulam and Somerville	"			22,000 00			
County of Haliburton	"			54,000 00	186,000 00		
Township of Woolwich	Waterloo Junction (in Grand Trunk system).			28,000 00			
Section of Peel	"			7,000 00			
Village of Elmira	"			10,000 00			
" St Jacobs	"			2,000 00	47,000 00		
Fergus	Wellington, Grey and Bruce			10,000 00			
Peel	" "			40,000 00			
Elora	" "			10,000 00			
Maryboro'	" "			40,000 00			
Nichol	" "			10,000 00			
Wallace	" "			35,000 00			
Minto	" "			65,000 00			
Bruce	" "			278,000 00			
Howick	" "			20,000 00			

Listowel	" "			15,000 00			
Grey	" "			35,000 00			
Elma	" "			30,000 00			
Morris	" "			30,000 00			
W. Wawanosh	" "			18,000 00			
Ashfield	" "			10,000 00			
Turnbury	" "			28,000 00			
Kincardine	" "			8,000 00			
					682,000 00		
City of London	West Ontario Pacific				25,000 00		
Town of Whitby	Whitby, Port Perry and Lindsay (in Grand Trunk system).			70,000 00			
Township of Whitby	" "			15,000 00			
" Reach	" "			30,000 00			
" Scugog	" "			2,000 00			
County of Victoria	" "			85,000 00			
Village of Port Perry	" "			20,000 00			
Manufacturing Co	" "			94 93			
					222,094 93		
			980,311 00		10,006,353 37		1,211,500 00
QUEBEC.							
Caplin	Baie des Chaleurs (now in Atlantic and Lake Superior system)			5,000 00			
New Richmond	"			6,000 00			
Maria	"			6,000 00			
Carleton	"			6,000 00			
Nouvelle and Shoolbred	"			6,000 00			
New Carlisle	"			6,000 00			
Paspébiac	"			3,000 00			
Hamilton	"			2,500 00			
					40,500 00		
Parish of St. Antoine	Great Eastern			10,000 00			
" St. Denis	"			10,000 00			
					20,000 00		
Village St. Andrews	Ottawa Valley				10,000 00		
Farnham	Canadian Pacific				20,000 00		
Town of Nicolet	Drummond County (now in Intercolonial Ry.).			10,000 00			
Municipality of St. Leonard	"			5,000 00			
					15,000 00		
Sabrevois	East Richelieu Valley (now in Quebec Southern).			2,000 00			
Henryville	" "			4,500 00			
					6,500 00		
Parish of St. Sophie	Great Northern of Canada			4,000 00			
Village of New Glasgow	"			2,000 00			
Village of St. Elizabeth	"			6,000 00			
Town of Joliette	"			35,000 00	47,000 00		

No. 10.—Statement of Aid granted to Railways by Municipalities—*Continued.*

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscriptions to Shares or Bonds.	Total.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Quebec—*Concluded.*							
City of Three Rivers	Lower Laurentian (in Great Northern).				25,000 00		
City of Quebec	Great Northern of Canada						200,000 00
County of Compton	International, now in Atlantic and North-west, C.P.R.						225,000 00
Township of Melbourne and Brompton Gore	Missisquoi & Black Riv. Valley, now in Atlantic & North-west, C.P.R.					25,000 00	
Township of Ely	" "					25,000 00	
Township of North Stukely	" "					25,000 00	
" Bolton	" "					25,000 00	100,000 00
St. Pie	Lake Champlain and St. Lawrence J (leased to Montr'l and Atlantic Ry.)			20,000 00			
L'Ange Gardien	" "			10,000 00			
St. Paul	" "			6,000 00			
Philipsburg	" "			15,000 00	51,000 00		
Town of L'Assomption	L'Assomption.				1,500 00		
Ascot	Massawippi Valley					40,000 00	
Hatley	"					25,000 00	65,000 00
	Montreal & Champlain Junction—						
Ormstown	(Grand Trunk)			10,000 00			
St. Constant	" "			1,800 00			
Ste. Philomène	" "			2,820 00			
Laprairie	" "			1,904 00			
Huntingdon	" "			3,000 00			
St. Isidore	" "			1,500 00			
Dewittsville	" "			750 00	21,774 00		
Municipality of Rigaud	Montreal and Ottawa			2,000 00			
Parish of Rigaud	"			800 00			
Point Fortune	"			2,500 00	5,300 00		
Chambly Canton	Montreal and Province line, formerly Montreal, Portland and Boston			15,000 00			
" Basin	" "			10,000 00	25,000 00		

County of Pontiac	Pontiac Pacific Junction			100,000 00			
Village of Shawville	" "			1,000 00			
					101,000 00		
City of Sherbrooke	Quebec Central			50,000 00			
Parish of Dudswell	"			25,000 00			
" Weedon	"			25,000 00			
Township of Garthby	"			3,000 00			
					103,000 00		
City of Quebec	Quebec Bridge				300,000 00		
City of Quebec	Quebec and Lake St. John					450,000 00	
Town of Chicoutimi	" "				12,000 00		
City of Montreal	Quebec, Montreal, Ottawa and Occidental	1,000,000 00					450,000 00
" Quebec	" "	1,000,000 00					
" Three Rivers	" "	100,000 00					
County of Ottawa	" "	200,000 00					
St. Sauveur de Quebec	" "	25,000 00					
Côte St. Louis	" "	25,000 00					
Village of Ste. Thérèse	" "	12,000 00					
Parish of "	" "	12,000 00					
" St. Jérôme	" "	10,000 00					
Village "	" "	15,000 00					
Ste. Scholastique	" "	10,000 00					
St. Andrews	" "	25,000 00					
St. Jérusalem d'Argenteuil	" "			25,000 00			
			2,434,000 00		25,000 00		
County of Brome	South-eastern (now Montreal and Atlantic)					50,000 00	
Township of Brome	" "					50,000 00	
" Sutton	" "					63,000 00	
" Potton	" "					25,000 00	
" Farnham	" "					20,000 00	
Village of West Farnham	" "					5,000 00	
" East "	" "					5,000 00	
" Waterloo	" "					30,000 00	
" Drummondville	" "					15,000 00	
County of Drummond	" "					90,000 00	
Township of Wickham	" "					10,000 00	
" St. Germain	" "					15,000 00	
Township of Sorel	" "					40,000 00	
Village of Actonvale	" "					15,000 00	
" Roxton Falls	" "					15,000 00	
Township of Roxton	" "					20,000 00	
" Shefford	" "					50,000 00	
" West Wickham	" "					10,000 00	
City of Sorel	South Shore, formerly Mont. & Sorel				25,000 00		528,000 00
Fraserville	Témiscouata				25,000 00		
			2,434,000 00		879,574 00		1,568,000 00

No. 10.—STATEMENT of Aid granted to Railways by Municipalities—*Concluded.*

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
NEW BRUNSWICK.		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Hillsboro', Hopewell and Harvey Parishes	Albert, now Salisbury and Harvey			40,000 00			
Coverdale, Hillsboro', Hopewell and Harvey Parishes	"			30,000 00	70,000 00		
City of St. John	Canadian Pacific				40,000 00		
" Fredericton	Fredericton			50,000 00			
County of York	"			30,000 00	80,000 00		
Parish of St. George	Grand Southern, now Shore Line			2,000 00			
" Pennfield	" "			500 00			
Lepreau	" "			500 00	3,000 00		
Town of Fort Fairfield	New Brunswick			12,000 00			
" Lyndon	"			11,000 00	23,000 00		
City of Calais	New Brunswick and Canada			12,500 00			
" Houlton	" "			22,000 00			
" St. Stephen	" "			13,000 00	47,500 00		
County of Northumberland	Northern and Western of New Brunswick, now Canada Eastern				20,000 00		
Parish of Elgin	Elgin and Havelock				13,000 00		
Town of Campbellton	Restigouche and Western				5,000 00		
City of St. John	St. John and Maine						60,000 00
					301,500 00		60,000 00
NOVA SCOTIA.							
County of King	Cornwallis Valley, (now in Dominion Atlantic)				27,685 00		
Counties of Yarmouth, Digby and Annapolis	Western Counties, Yarmouth and Annapolis (now in Dominion Atlantic)				150,000 00		
Town of Truro	Midland of N.S., formerly Stewiacke Valley and Lansdowne				30,000 00		

County of Pictou	New Glasgow Iron, Coal and Railway Co., (now Nova Scotia Steel Co's Ry.)				4,000 00		
" Shelburne	Nova Scotia Southern			50,000 00			
" Queen's	"			25,000 00			
" Lunenburg	"			5,000 00	80,000 00		
Lunenburg	Central, Nova Scotia				88,874 17		
Argyle	Halifax & Yarmouth				5,000 00		
County of Inverness	Inverness & Richmond				100,000 00		
					485,559 17		
MANITOBA.							
City of Winnipeg	Canadian Pacific			200,000 00			
County of Selkirk	"			35,000 00			
Township of St. Andrews	"			35,000 00			
Town of Morris	"			100,000 00	370,000 00		
County of Westborne	Manitoba and North-western			75,000 00			
Town Portage la Prairie	" "			50,000 00			
" Minnedosa	" "			30,000 00			
Municipality of Shoal Lake	" "			20,000 00			
" Birtle	" "			40,000 00			
" Strathclair	" "			600 00	215,600 00		
Rapid City	Saskatchewan and Western				10,000 00		
					595,600 00		
BRITISH COLUMBIA.							
City of New Westminster	Canadian Pacific				37,500 00		
NORTH-WEST TERRITORIES.							
Calgary	Canadian Pacific				25,000 00		
Total aid granted by municipalities			3,414,311 00		12,331,086 54		2,839,500 00

NOTE.—For statement of payments of Municipal Aid granted to Railway—See No. 1 Summary statement of Capital.

No 10.—SUMMARY STATEMENT of aid granted to Steam Railways constructed and under construction by Governments and Municipalities, June 30, 1901.

—	Loan.	Total.	Bonus.	Total.	Subscription to shares or Bonds.	Total.	Grand Total.	
Governments.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
Dominion	15,964,533 05		158,536,736 31				174,501,269 36	
Ontario	26,000 00		8,683,578 04				8,709,578 04	
Quebec	3,722,956 00		13,977,980 50				17,700,936 50	
New Brunswick			4,244,439 71		300,000 00		4,544,439 71	
Nova Scotia			2,619,316 53				2,619,316 53	
Manitoba	900,000 00		941,952 75				1,841,952 75	
British Columbia			37,500 00				37,500 00	
		20,613,489 05		189,041,503 84		300,000 00		209,954,992 89
Municipalities.								
Ontario	980,311 00		10,006,353 37		1,211,500 00		12,198,164 37	
Quebec	2,434,000 00		879,574 00		1,568,000 00		4,881,574 00	
New Brunswick			301,500 00		60,000 00		361,500 00	
Nova Scotia			485,559 17				485,559 17	
Manitoba			595,600 00				595,600 00	
British Columbia			37,500 00				37,500 00	
North-west Territories			25,000 00				25,000 00	
		3,414,311 00		12,331,086 54		2,839,500 00		18,584,897 54
		24,027,800 05		201,372,590 38		3,139,500 00		228,539,890 43

ELECTRIC RAILWAY STATISTICS

OF THE

DOMINION OF CANADA

FOR THE YEAR ENDED JUNE 30, 1901.

ELECTRIC RAILWAYS.

NOMINAL Capital paid up, June 30, 1901.

—	Miles Constructed.	Ordinary Share Capital.	Preference Share Capital.	Bonded Debt.	Dominion Government Aid.	Municipal Aid.	Capital from other Sources.	Total.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts	$ cts.
Ontario	386·00	10,784,595 96	158,300 00	7,052,427 89	60,800 00	173,000 00	1,138,631 43	19,367,755 28
Quebec	197·20	8,212,900 00	315,000 00	2,736,333 00	....	....	690,264 45	11,954,497 45
New Brunswick	12·00	500,000 00	....	675,000 00	....	....	....	1,175,000 00
Nova Scotia	10·43	805,450 00	....	600,000 00	....	....	....	1,405,450 00
Manitoba	18·00	895,170 00	....	1,000,000 00	....	....	....	1,895,170 00
British Columbia	50·95	1,223,333 00	661,866 00	1,216,666 00	....	....	176,280 85	3,278,145 85
	674·58	22,421,448 96	1,135,166 00	13,280,426 89	60,800 00	173,000 00	2,005,176 73	39,076,018 58

No. 2.—SUMMARY STATEMENT of the different descriptions

Number.	NAME OF ELECTRIC RAILWAY.	Length of Line.		Power Houses.		No. of Motor Cars.		Trailers.	
		Completed.	Under Construction.	With Water Power.	With Steam Power.	Owned.	Hired.	Owned.	Hired.
				Owned.	Owned.				
		Miles.	Miles.						
1	Belleville Traction Co.	2·00							
2	Berlin and Waterloo	3·02				5		2	
3	Brantford Street	5·90			1	10		4	
4	British Columbia	48·30		1	2	*48			
5	Cornwall	6·00			1	8			
6	Galt, Preston and Hespeler	9·00			1	8		3	
7	Guelph	5·50			1				
8	Halifax	8·43							
9	Hamilton and Dundas	7·25				3		3	
10	Hamilton, Grimsby and Beamsville	23·00			1	9		2	
11	Hamilton Radial	12·00				8		1	
12	Hamilton Street	22·00				64			
13	Hull	13·63		*2		17		4	
14	Kingston, Portsmouth and Cataraqui	7·40				15			
15	London	28·50			4	31		9	
16	Metropolitan	28·00			2	13		3	
17	Montreal Park and Island	40·88			2	30	8		
18	Montreal Street	103·43			1	*666			
19	Montreal Terminal	14·10			1	17			
20	Nelson Electric Tramway Co	2·65			*1	3			
21	Niagara Falls Park and River	13·68		1	1	25		16	
22	Niagara Falls, Wesley Park and Clifton	4·33				6			
23	Niagara, St. Catharines and Toronto	19·94		1	1	13			
24	Oshawa	8·02		1	1	2		1	
25	Ottawa	23·85		2		96		2	
26	Port Arthur	7·60			1	4			
27	Port Dalhousie, St. Catharines and Thorold	6·82		2		6		2	
28	Quebec Light and Power Co. Quebec City Street Ry.	17 22		1		56			
29	St. John	12·00			1	22			
30	St. Thomas	5·84			1	8		2	2
31	Sandwich, Windsor and Amherstburg	15·00			1	25			
32	Sarnia	4·50			*1	4		2	
33	Schomberg and Aurora		15·00						
34	Sherbrooke	7·75				10			
35	Toronto and Mimico	5·87			*1	9			
36	Toronto and Scarboro	5·07				4			
37	Toronto Street	89·10			1	*425		219	
38	Toronto Suburban	7·50			1	5			
39	Winnipeg	18·00				46		16	
40	Woodstock, Thames Valley and Ingersoll	9·50	2·50		1	5			
41	Yarmouth	2·00				2			
		674·58	17·50	11	30	1,728	8	291	2

of Rolling Stock, for the Year ended June 30, 1901.

Electric Locomotives.		No. of Baggage, Mail and Express Cars owned.	No. of Cattle and Box Freight Cars owned.	No. of Platform Cars owned.	No. of Tool Cars owned.	No. of Snow Ploughs owned.	No. of Snow Sweepers owned.	Number.	Remarks.
Owned.	Hired.								
....	....	....	....	....	....	....	....	1	Not in operation. Return very imperfect. Road passed into hands of creditors Sept., 1901, and closed down.
....	....	....	....	....	1	....	1	2	Power furnished by Berlin Gas Co.
....	....	....	....	....	....	1	....	3	
....	....	3	....	....	....	....	1	4	* Including trailers. This return from March 31, 1900, for year ended March 31, 1901.
1	....	....	....	2	....	1	1	5	
....	....	....	1	1	....	....	1	6	
....	....	....	....	....	....	....	....	7	Number of cars not given; imperfect return
....	....	....	....	....	....	....	....	8	"　　"
1	....	....	....	....	....	....	....	9	
2	....	....	3	3	....	....	1	10	
....	....	....	....	2	....	....	....	11	
....	....	....	....	....	....	....	2	12	
2	....	1	....	....	....	2	1	13	* 1 rented.
....	....	....	1	....	....	....	....	14	Imperfect return.
....	....	....	....	....	....	....	1	15	
....	....	2	....	5	....	....	....	16	
....	....	....	....	....	....	1	2	17	
....	....	....	....	16	3	2	19	18	* Includes 1 official car.
1	....	....	....	2	....	2	....	19	
....	....	....	....	....	....	....	....	20	* One substation-electric power.
....	....	1	....	2	....	....	....	21	
....	....	....	....	....	....	....	....	22	
....	1	1	1	15	....	1	....	23	
....	....	1	....	1	....	....	1	24	
1	....	3	....	....	*1	....	7	25	* Salt car.
....	....	....	....	....	2	....	....	26	
....	....	....	....	....	....	....	....	27	From May 9, 1901, to June 30, 1901.
....	....	....	....	....	....	....	8	28	
....	....	....	....	....	....	....	2	29	
....	....	....	....	....	....	1	....	30	
....	....	....	....	....	....	1	....	31	
....	....	1	....	....	....	....	....	32	* Rented.
....	....	....	....	....	....	....	....	33	Under construction.
....	....	....	....	....	....	1	....	34	
....	....	....	....	....	....	....	....	35	* Rented.
....	....	....	....	....	....	....	....	36	2·15 miles not in operation. Imperfect return.
....	....	....	1	2	....	2	12	37	*Includes 1 official car.
....	....	....	....	....	....	....	1	38	
....	....	....	....	....	....	....	1	39	
....	....	....	....	....	....	....	....	40	
....	....	....	....	5	....	1	....	41	
8	1	13	7	56	7	16	62		

No. 3.—SUMMARY STATEMENT of Characteristics of Electric

Number.	Name of Electric Railway.	Length of Line.				Length of Siding.	Weight per Yard.		No. of Ties to mile.
		Completed. (Rails laid.)	Under construction.	Iron Rails.	Steel Rails.		Iron Rails.	Steel Rails.	
1	Belleville Traction Co	2·00	....	·25	1·75	....	40	60 & 65	....
2	Berlin and Waterloo	3·02	....	....	3·02	....	....	45, 60, 65	2640
3	Brantford Street	5·90	....	....	5·90	....	....	40 & 56	1760
4	British Columbia	48·30	....	....	48·30	....	....	25 to 108	2640
5	Cornwall	6·00	....	....	6·00	·50	....	56	....
6	Galt, Perston and Hespeler	9·00	....	4·50	4·50	1·00	56	56	2112
7	Guelph	5·50	....	....	5·50	·33	....	56 & 60	....
8	Halifax	8·43	....	....	8·43	·56	....	60 & 80	....
9	Hamilton and Dundas	7·25	....	....	7·25	....	....	60	2600
10	Hamilton, Grimsby and Beamsville	23·00	....	....	23·00	....	....	50-65	2347
11	Hamilton Radial	12·00	....	....	12·00	·50	....	65	2640
12	Hamilton Street	22·00	....	....	22·00	....	....	60	2640
13	Hull	13·63	....	....	13·63	2·00	....	56	2640
14	Kingston, Portsmouth and Cataraqui	7·40	....	....	7·40	....	....	....	2640
15	London St.	28·50	....	....	28·50	....	....	....	2640
16	Metropolitan	28·00	....	....	28·00	2·00	....	56	2600
17	Montreal Park and Island	40·88	....	....	40·88	·98	....	56	2640
18	Montreal Street	103·43	....	....	103·43	2·16	..	56 to 90	2640
19	Montreal Terminal	14·10	....	....	14·10	....	....	56 & 65	2640
20	Nelson Electric Tramway Co	2·65	....	....	2·65	....	....	45 & 60	2600
21	Niagara Falls Park and River	13·68	....	....	13·68	·80	....	56	2640
22	Niagara Falls, Wesley Park and Clifton	4·33	....	....	4·33	....	....	60	2600
23	Niagara, St. Catharines and Toronto	19·94	....	....	19·94	2·15	....	56	2640
24	Oshawa	8·02	....	....	8·02	....	....	64	2640
25	Ottawa	23·85	....	....	23·85	....	....	....	2630
26	Port Arthur	7·60	....	....	7·60	·13	....	42	2640
27	Port Dalhousie, St. Catharines and Thorold	6·82	....	....	6·82	....	....	50	....
28	Quebec Light and Power Co. Quebec City Street Railway.	17·22	....	....	17·22	....	....	56 & 72	....
29	St. John	12·00	....	....	12·00	....	....	74	2464
30	St. Thomas	5·84	....	....	5·84	·38	....	65	2640
31	Sandwich, Windsor and Amherstburg	15·00	....	....	15·00	....	....	56	1800
32	Sarnia	4·50	....	....	4·50	·23	....	45, 56 & 66	2113
33	Schomberg and Aurora	....	15·00	....	....	....	....	....	....
34	Sherbrooke	7·75	....	....	7·75	....	....	60	2000
35	Toronto and Mimico	5·87	....	....	5·87	·38	....	56	....
36	Toronto and Scarboro	5·07	....	....	5·07	....	....	56	....
37	Toronto Street	89·10	....	....	89·10	....	....	56 to 84	....
38	Toronto Suburban	7·50	....	....	7·50	....	....	56 & 72	....
39	Winnipeg	18·00	....	....	18·00	....	....	56	2640
40	Woodstock, Thames Valley and Ingersoll	9·50	2·50	....	9·50	....	....	56, 65	2112
41	Yarmouth	2·00	....	....	2·00	....	....	47	....
		674·58	17·50	4·75	669·83	14·19	....	....	....

Railways for the Year ended June 30, 1901.

Nature of Rail Fastening.	No. of Level crossings		No. of overhead Bridges.	Height of overhead bridges above rail level.	Level crossings of other Railways.	No. of Junctions with other Railways.	No. of Junctions with Branch Lines.	Radius of sharpest curve.	No. of feet per mile of heaviest gradient.	Gauge of Railway.	Number.	Remarks.
	Guarded.	Not Guarded.										
								Ft.				
....	....	....	..	....	....	....	....	....	...	......	1	Not in operation. Return very imperfect; road passed into hands of creditors, Sept., 1901, and closed down.
Plain fish plates	2	....	..	....	2	....	....	40	209	4·8½	2	
Fish plates	....	....	..	....	4	....	....	30	253	4·8½	3	
Fish plates and angle bars	....	....	..	....	4	....	....	27	630	4·8½	4	This return from March 31, 1900, for year ended Mar. 31, 1901.
Fish plates and bolts	....	....	..	....	....	....	....	50	100	4·8½	5	
Plain fish plates	....	3	..	....	1	1	....	72	264	4·8½	6	
....	..	....	..	....	1	....	....	64	396	4·8½	7	
....	....	....	..	....	....	....	....	...	....	....	8	1·58 miles double track.
Angle bars	....	2	1	14·½	2	2	....	38	158	4·8½	9	
Fish plates and angle bars	....	35	..	...	2	1	....	127	211	4·8½	10	
Angle bars	2	2	2	16	5	....	..	105	158	4·8½	11	
Plain fish plates	....	....	..	..	3	....	....	40	370	4·8½	12	10·50 miles double track.
Fish plates	...	5	1	22·0	2	2	3	193	264	4·8½	13	6·85 miles double track.
Angular fish plates	....	....	.	....	1	1	....	....	....	4·8½	14	Imperfect return.
....	4	....	..	....	....	....	....	....	....	4·8½	15	11·68 miles double track.
Angle bars	...	40	1	22·0	..	..	..	383	455	4·8½	16	
Angle bars and bolts	1	23	1	20	3	..	...	146	318	4·8½	17	Double track, 14·10 miles.
Fish plates and angle bars	....	....	4	29·6	13	4	....	40	666	4·8½	18	Double track, 38·79 miles.
Angle plates	....	11	..	....	5	1	3	88	26	4·8½	19	
Fish plates	....	....	..	....	....	....	....	60	686	4·8½	20	
Standard angle bar plates	1	16	2	14·0 22·0	..	2	1	115	300	4·8½	21	Double track, 11·43 miles.
Continuous rail joints	1	19	..	....	1	2	....	48	158	4·8½	22	
Fish plates	....	35	2	22	2	2	....	50	182	4·8½	23	
Angle irons	...	28	..	....	1	1	...	80	211	4·8½	24	
Fish plates and angle bars	3	2	1	17·0	5	3	....	35	422	4·8½	25	Double track, 18·28 miles.
Fish plates	....	1	..	..	1	....	....	30	2	4·8½	26	
"	....	25	2	25·0	1	1	1	66	334	4·8½	27	From May 9, 1901, to June 30, 1901.
Plain and angle fish plates	2	....	..	....	2	....	....	35	75	4·8½	28	
Angle bars and bolts	....	....	..	....	1	....	....	40	475	4·8½	29	
Angle plates	....	....	..	....	4	....	...	45	264	4·8½	30	
Fish plates	....	...	..	...	....	...	....	....	106	4·8½	31	
"	....	...	..	....	1	....	....	....	....	4·8½	32	
....	....	....	..	....	....	....	....	....	....	....	33	Under construction.
Fish plates	....	....	..	....	2	....	..	60	739	4·8½	34	
....	....	...	2	....	....	....	....	65	264	4·10⅞	35	Imperfect return.
....	....	....	..	....	....	....	....	65	264	4·10⅞	36	2·15 miles not in operation; imperfect return.
....	....	....	..	....	....	....	....	40	264	4·10⅞	37	44·40 miles double track; imperfect return.
....	....	....	..	....	2	1	....	35	412	4·10½	38	
Fish plates	....	....	..	....	2	....	....	40	....	4·8½	39	
Fish plates and bolts	....	....	1	15	....	....	....	50	6	4·8½	40	
Fish plates	1	....	..	....	1	....	....	....	....	4·8½	41	Imperfect return.
	17	247	20	....	74	24	8	....	....	.....		

No. 4.—SUMMARY STATEMENT of the Operations of the

Number.	Name of Electric Railway.	Mileage	Train Mileage.			Locomotive Mileage.
			Passenger Cars.	Freight Cars.	Total Car Mileage.	
1	Belleville Traction Co	2·00	....	....	....	....
2	Berlin and Waterloo.	3·02	73,820	....	73,820	....
3	Brantford Street	5·90	200,000	....	200,000	....
4	British Columbia	48·30	1,412,486	....	1,412,486	....
5	Cornwall.	6·00	144,728	7,494	152,222	....
6	Galt, Preston and Hespeler	9·00	71,000	11,500	82,500	....
7	Guelph	5·50	195,300	500	195,800	....
8	Halifax	8·43	612,149	....	612,149	....
9	Hamilton and Dundas	7·25	70,889	....	70,889	....
10	Hamilton, Grimsby and Beamsville.	23·00	232,024	....	232,024	....
11	Hamilton Radial.	12·00	192,740	....	192,740	....
12	Hamilton Street.	22·00	1,191,261	....	1,191,261	....
13	Hull	13·63	353,923	19,420	373,343	19,420
14	Kingston, Portsmouth and Cataraqui	7·40	96,011	....	96,011	....
15	London	28·50	....	....	....	....
16	Metropolitan	28·00	250,000	....	250,000	....
17	Montreal Park and Island	40·88	659,397	....	659,397	....
18	Montreal Street	103·43	10,491,387	....	10,491,387	....
19	Montreal Terminal	14·10	218,836	12,862	231,698	....
20	Nelson Electric Tramway Co.	2·65	85,000	....	85,000	....
21	Niagara Falls Park and River.	13·68	277,302	....	277,302	....
22	Niagara Falls, Wesley Park and Clifton	4·33	....	....	....	....
23	Niagara, St. Catharines and Toronto	19·94	183,600	21,900	205,500	21,900
24	Oshawa	8·02	42,471	9,450	51,921	....
25	Ottawa	23·85	2,253,092	....	2,253,092	....
26	Port Arthur	7·60	71,000	....	71,000	....
27	Port Dalhousie, St. Catharines and Thorold	6·82	....	....	....	....
28	Quebec Light and Power Co. Quebec City Street Ry	17·22	1,089,450	....	1,089,450	....
29	St. John	12·00	445,667	....	445,667	....
30	St. Thomas	5·84	....	....	....	....
31	Sandwich, Windsor and Amherstburg	15·00	....	....	....	....
32	Sarnia	4·50	82,632	....	82,632	....
33	Sherbrooke.	7·75	....	....	....	....
34	Toronto and Mimico.	5·87	165,557	....	165,557	....
35	Toronto and Scarboro'	2·92	99,256	....	99,256	....
36	Toronto Street	89·10	9,292,020	....	9,292,020	....
37	Toronto Suburban.	7·50	76,059	....	76,059	....
38	Winnipeg	18·00	1,019,086	....	1,019,086	....
39	Woodstock, Thames Valley and Ingersoll	9·50	19,485	....	19,485	....
40	Yarmouth	2·00	....	....	....	....
		672·43	31,667,628	83,126	31,750,754	41,320

Year and Mileage, for the Year ended June 30, 1901.

Total Number of Passengers Carried.	Tons of Freight of 2,000 lbs., Handled.	Average Rate of Speed of Passenger Cars. Miles per Hour.	Average Rate of Speed of Freight Cars. Miles per Hour.	Number.	Remarks.
...	...	...	...	1	Not in operation now. Return very imperfect. Road passed into hand of creditors, Sept., 1901, and closed down.
302,400	...	7	...	2	
260,514	...	8	...	3	
5,336,310	...	8	...	4	This report from March 31, 1900, for year ended March 31, 1901.
241,944	...	12	5	5	
250,168	21,231	10	6	6	
300,158	...	...	...	7	
2,968,811	...	...	...	8	
259,203	1,100	14	...	9	
278,507	3,618	15	12	10	
464,810	1,220	25	...	11	
3,693,677	...	12	...	12	
533,328	111,691	25	20	13	
653,171	...	...	...	14	
...	...	...	...	15	Imperfect return.
424,924	800	20	...	16	
1,275,498	33,000	15	...	17	
45.833,652	...	8	...	18	
348,310	18,435	20	20	19	
110,000	...	10	...	20	
668,699	...	9	...	21	
226,110	...	8	...	22	Imperfect return.
253,845	52,996	20	...	23	
110,800	43,835	...	...	24	
7,469,304	...	8	...	25	
242,673	...	15	...	26	
...	...	...	...	27	Imperfect return.
3,715,675	...	8	...	28	
1,710,223	...	8	...	29	
310,725	...	...	...	30	Imperfect return.
...	...	...	...	31	Imperfect return.
295,166	...	8	...	32	
550,000	...	15	...	33	Imperfect return.
379,345	...	...	...	34	
288,232	...	...	...	35	
37,620,583	...	...	...	36	
335,962	...	9	...	37	
3,196,489	...	...	...	38	
25,440	...	12	...	39	
...	...	...	...	40	Imperfect return.
120,934,656	287,926				

No. 5.—SUMMARY STATEMENT of Description of Freight

Number.	NAME OF ELECTRIC RAILWAY.	Mileage.	Flour.		Grain.		Live Stock.	
			Barrels.	Tons.	Bushels.	Tons.	No.	Tons.
1	Belleville Traction Co	2·00	......	......	......	......	......	......
2	Berlin and Waterloo	3·02	......	......	......	......	......	......
3	Brantford Street	5·90	......	......	......	......	......	......
4	British Columbia	48·30	......	......	......	......	......	......
5	Cornwall	6·00	......	......	......	......	......	......
6	Galt, Preston and Hespeler	9·00	9,000	900	12,000	360	250	100
7	Guelph	5·50	......	......	......	......	......	......
8	Halifax	8·43	......	......	......	......	......	......
9	Hamilton and Dundas	7.25	......	......	......	......	......	......
10	Hamilton, Grimsby and Beamsville	23·00	......	......	1,600	48	......	......
11	Hamilton Radial	12·00	50	5	1,800	30	......	......
12	Hamilton Street	22·00	......	......	......	......	......	......
13	Hull	13·63	56,390	5,700	367,308	10,556	9,185	1,227
14	Kingston, Portsmouth and Cataraqui	7·40	......	......	......	......	......	......
15	London	28·50	......	......	......	......	......	......
16	Metropolitan	28·00	......	......	......	......	......	......
17	Montreal Park and Island	40·88	......	......	......	......	......	......
18	Montreal Street	103·43	......	......	......	......	......	......
19	Montreal Terminal	14·10	......	......	......	......	50	15
20	Nelson Electric Tramway Co	2·65	......	......	......	......	......	......
21	Niagara Falls Park and River.,	13·68	......	......	......	......	......	......
22	Niagara Falls, Wesley Park and Clifton	4·33	......	......	......	......	......	......
23	Niagara, St. Catharines and Toronto.	19·94	3,724	376	11,060	237	......	......
24	Oshawa	8·02	2,480	248	56,655	1,558	1,273	509
25	Ottawa	23·85	......	......	......	......	......	......
26	Port Arthur	7·60	......	......	......	......	......	......
27	Port Dalhousie, St. Catharines and Thorold	6·82	......	......	......	......	......	......
28	Quebec Light and Power Co. Quebec City Street Railway	17·22	......	......	......	......	......	......
29	St. John	12·00	......	......	......	......	......	......
30	St. Thomas	5·84	......	......	......	......	......	......
31	Sandwich, Windsor and Amherstburg	15·00	......	......	......	......	......	......
32	Sarnia	4·50	......	......	......	......	......	......
33	Sherbrooke	7·75	......	......	......	......	......	......
34	Toronto and Mimico	5·87	......	......	......	......	......	......
35	Toronto and Scarboro	2·92	......	......	......	......	......	......
36	Toronto Street	89·10	......	......	......	......	......	......
37	Toronto Suburban	7·50	......	......	......	......	......	......
38	Winnipeg	18·00	......	......	......	......	......	......
39	Woodstock, Thames Valley and Ingersoll	9·50	......	......	......	......	......	......
40	Yarmouth	2·00	......	......	......	......	......	......
		672·43	71,644	7,229	450,423	12,789	10,758	1,851

Carried, for the Year ended June 30, 1901.

Lumber of all kinds except Firewood.		Firewood.		Manufactured Goods.	All other Articles.	Total Weight Carried.	Number.	Remarks.
Feet.	Tons.	Cords.	Tons.	Tons.	Tons.	Tons.		
....	....	....	....	....	....	....	1	Not in operation now. Return very imperfect. Road passed into hands of creditors Sept., 1901, and closed down.
....	....	....	....	....	....	....	2	
....	....	....	....	....	....	....	3	
....	....	....	....	....	....	....	4	
....	....	....	....	....	....	....	5	
200,000	500	....	....	3,000	16,371	21,231	6	
....	....	....	....	....	....	....	7	
....	....	....	....	....	....	....	8	
....	....	....	....	100	1,000	1,100	9	
....	....	....	....	....	3,570	3,618	10	
73,800	120	....	....	....	1,065	1,220	11	
....	....	....	....	....	....	....	12	
53,818,200	78,228	1,240	1,865	9,871	4,244	111,691	13	
....	....	....	....	....	....	....	14	No record kept of contents of cars transferred.
....	....	....	....	....	....	....	15	
....	....	....	....	....	800	800	16	
....	....	....	....	....	*33,000	33,000	17	*Stone.
....	....	....	....	....	....	....	18	
1,503,272	2,067	....	....	2,792	13,561	18,435	19	
....	....	....	....	....	....	....	20	
....	....	....	....	....	....	....	21	
....	....	....	....	....	....	....	22	
1,274,445	2,843	524	920	9,106	39,514	52,996	23	
2,608,572	4,565	1,022	1,534	10,306	25,115	43,835	24	
....	....	....	....	....	....	....	25	Freight cars switched only, no record kept of weight or contents.
....	....	....	....	....	....	....	26	
....	....	....	....	....	....	....	27	
....	....	....	....	....	....	....	28	
....	....	....	....	....	....	....	29	
....	....	....	....	....	....	....	30	
....	....	....	....	....	....	....	31	
....	....	....	....	....	....	....	32	
....	....	....	....	....	....	....	33	
....	....	....	....	....	....	....	34	
....	....	....	....	....	....	....	35	
....	....	....	....	....	....	....	36	
....	....	....	....	....	....	....	37	
....	....	....	....	....	....	....	38	
....	....	....	....	....	....	....	39	
....	....	....	....	....	....	....	40	
59,478,289	88,323	2,786	4,319	35,175	138,240	287,926		

No. 6.—Summary Statement of Earnings

Number.	Name of Electric Railway.	Mileage.	Passenger Traffic.	Freight Traffic.	Mails and Express Freight.
			$ cts.	$ cts.	$ cts.
1	Belleville Traction Co	2·00	4,012 97		
2	Berlin and Waterloo	3·02	12,818 59		545 17
3	Brantford St.	5·90	11,152 03		
4	British Columbia	48·30	283,044 58		13,454 16
5	Cornwall	6·00	11,206 42	4,310 24	250 00
6	Galt, Preston and Hespeler	9·00	15,241 72	8,157 72	
7	Guelph	5·50	12,584 08	328 15	
8	Halifax	8·43	135,173 95		
9	Hamilton and Dundas	7·25	24,731 07	1,559 23	
10	Hamilton, Grimbsy and Beamsville	23·00	40,192 12	7,424 93	2,833 38
11	Hamilton Radial	12·00	38,345 36	1,730 00	
12	Hamilton Street	22·00	152,127 15		
13	Hull	13·63	37,388 60	16,887 11	600 00
14	Kingston, Portsmouth and Cataraqui	7·40	25,817 10	1,420 00	
15	London	28·50	125,575 25		
16	Metropolitan	28·00	57,084 56	3,770 56	2,000 00
17	Montreal Park and Island	40·88	120,369 36	1,657 99	
18	Montreal Street	103·43	1,855,656 09		
19	Montreal Terminal	14·10	34,435 96	3,825 95	500 00
20	Nelson Electric Tramway Co	2·65	8,640 90		
21	Niagara Falls Park and River	13·68	71,190 85		79 06
22	Niagara Falls, Wesley Park and Clifton	4·33	10,174 99		
23	Niagara, St. Catharines and Toronto	19·94	35,761 61	20,932 13	1,148 99
24	Oshawa	8·02	6,048 29	22,165 97	1,684 56
25	Ottawa	23·85	316,210 07	*912 36	4,000 00
26	Port Arthur	7·60	11,622 93		
27	Port Dalhousie, St. Catharines and Thorold	6·82	2,443 50		
28	Quebec Light and Power Co Quebec City St. Railway	17·22	159,126 65		750 00
29	St. John	12·00	78,421 41		
30	St. Thomas	5·84	11,716 76		505 32
31	Sandwich, Windsor and Amherstburg	15·00	45,083 29		
32	Sarnia	4·50	8,691 89		4,785 35
33	Sherbrooke	7·75	27,000 00		
34	Toronto and Mimico	5·87	20,050 36		
35	Toronto and Scarboro'	2·92	9,850 46		
36	Toronto Street	89·10	1,545,771 43		
37	Toronto Suburban	7·50	12,626 28		
38	Winnipeg	18·00	141,466 11		
39	Woodstock, Thames Valley and Ingersoll	9·50	1,910 83		
40	Yarmouth	2·00	8,921 78		
		672·43	5,529,687 35	95,082 34	33,135 99

for the Year ended June 30, 1901.

Other Sources.	Total Gross Earnings.	Total Net Earnings.	Proportion of Earnings to Working Expenses.	Earnings per Car Mile.	Number.	Remarks.
$ cts.	$ cts.	$ cts.	p. c.	Cts.		
....	4,012 97	— 801 78	83	......	1	Not in operation now. Return very imperfect. Road passed into hands of creditors, Sept. 1901 and closed down.
92 25	13,456 01	2,318 41	121	18·23	2	
8,400 32	19,552 35	— 7,412 62	73	9·78	3	
1,200 00	297,698 74	95,098 67	147	21·08	4	This report from March 31, 1900, for year ended March 31, 1901.
656 11	16,422 77	— 7,021 00	70	10·79	5	
363 76	23,763 20	6,700 43	139	28·80	6	
....	12,912 23	— 454 10	96	6·59	7	
....	135,173 95	24,608 06	122	22·08	8	
4,300 00	30,590 30	17,140 63	227	43·15	9	
983 43	51,433 86	30,482 56	245	22·17	10	
....	40,075 36	17,844 88	180	20·79	11	
5,451 64	157,578 79	71,105 03	182	13·23	12	
15,082 96	69,958 67	30,865 78	179	18·74	13	
9,819 64	37,056 74	7,425 98	125	38·60	14	
4,176 31	129,751 56	70,654 91	220	*	15	*No mileage given.
681 31	63,536 43	30,318 63	191	25·41	16	
3,364 53	125,391 88	49,809 54	166	19·02	17	
9,431 25	1,865,087 34	792,444 81	174	17·78	18	
3,531 53	42,293 44	20,224 14	192	18·25	19	
1,675 49	10,316 39	— 15,190 94	40	12·14	20	
15,755 34	87,025 25	41,439 05	191	31·38	21	
....	10,174 99	3,055 54	143	*	22	*No mileage given.
....	57,842 73	15,673 13	137	28·15	23	
1,446 97	31,345 79	11,008 78	154	60·37	24	
....	321,122 43	128,916 35	167	14·25	25	*For switching cars.
119 88	11,742 81	902 95	109	16·54	26	
....	2,443 50	1,131 20	186	*	27	From May 9, 1901 to June 30, 1901. *No mileage given.
....	159,876 65	41,972 63	136	14·67	28	
....	78,421 41	26,621 41	151	17·60	29	
118 99	12,341 07	— 2,072 49	86	*	30	*No mileage given.
....	45,083 29	13,183 41	141	*	31	*No mileage given.
1,892 66	15,369 90	2,163 53	116	18·60	32	
....	27,000 00	9,700 00	156	*	33	*No mileage given.
....	20,050 36	7,958 05	166	12·11	34	
....	9,850 46	3,145 16	147	9·92	35	
16,108 80	1,561,880 23	739,044 14	190	16·81	36	
375 00	13,001 28	— 545 04	96	17·09	37	
781 37	142,247 48	48,870 12	152	13·96	38	
....	1,910 83	45 63	102	9·80	39	
4,567 89	13,489 67	4,744 67	154	*	40	*No mileage given.
110,377 43	5,768,283 11	2,333,120 24				

No. 7.—SUMMARY STATEMENT of Operating

Number.	Name of Electric Railway	Mileage	Maintenance of Line, Buildings, &c.	Working and Repairs of Engines and Power Houses.	Working and Repairs of Cars.
			$ cts.	$ cts.	$ cts.
1	Bellevile Traction Co	2·00	4,814 75	.....	.....
2	Berlin and Waterloo	3·02	746 13	.....	630 15
3	Brantford St.	5·90	1,412 50	10,272 41	3,274 55
4	British Columbia	48·30	17,321 81	.....	21,381 20
5	Cornwall	6·00	339 44	6,579 67	.....
6	Galt, Preston and Hespeler	9·00	1,680 80	7,234 61	.....
7	Guelph	5·50	2,081 99	2,678 24	2,059 98
8	Halifax	8·43	.....	.....	.....
9	Hamilton and Dundas	7 25	2,180 29	5,663 16	647 73
10	Hamilton, Grimsby and Beamsville	23·00	3,782 90	4,844 40	1,511 00
11	Hamilton Radial	12 00	1,740 06	12,336 52	1,731 99
12	Hamilton Street	22·00	1,818 44	21,719 66	6,174 80
13	Hull	13·63	5,834 88	832 30	6,791 89
14	Kingston, Portsmouth and Cataraqui.	7·40	862 37	.....	2,726 15
15	London	28·50	.....	34,296 14	3,848 34
16	Metropolitan	28·00	4,028 03	.....	25,690 15
17	Montreal Park and Island	40·88	9,988 94	22,045 65	10,651 58
18	Montreal Street	103·43	153,776 66	† 198,198 02	157,473 84
19	Montreal Terminal	14·10	1,204 57	7,747 20	1,183 60
20	Nelson Electric Tramway Co	2·65	1,439 10	9,892 91	2,045 36
21	Niagara Falls Park and River	13·68	12,478 36	5,099 64	4,688 86
22	Niagara Falls, Wesley Park and Clifton	4·33	1,226 48	.....	542 85
23	Niagara, St. Catharines and Toronto	19·94	4,927 73	14,185 91	4,178 68
24	Oshawa	8·02	2,371 07	7,589 44	984 93
25	Ottawa	23 85	28,089 90	9,324 77	‡35,087 76
26	Port Arthur	7·60	2,105 32	4,171 52	3,525 95
27	Port Dalhousie, St. Catharines and Thorold.	6·82	94 88	.....	361 49
28	Quebec Light and Power Co. Quebec City St. Railway	17·22	19,983 52	69,219 16	7,913 76
29	St. John	12·00	.....	.....	.....
30	St. Thomas	5·84	408 80	.....	729 37
31	Sandwich, Windsor and Amherstburg	15·00	2,617 04	10,138 20	.....
32	Sarnia	4·50	.....	1,232 00	565 79
33	Sherbrooke	7 75	13,500 00	.....	800 00
34	Toronto and Mimico	5·87	.....	.....	.....
35	Toronto and Scarboro'	2·92	.....	.....	.....
36	Toronto St.	89·10	.....	.....	.....
37	Toronto Suburban	7·50	658 60	4,717 10	5,956 49
38	Winnipeg	18·00	6,467 48	26,283 11	9,442 07
39	Woodstock, Thames Valley and Ingersoll	9·50	59 58	.....	.....
40	Yarmouth	2·00	850 00	5,800 00	100 00
		672·43	310,892 42	502,101 74	322,700 31

Expenses for the year ended 30th June, 1901.

General Operating Expenses.		Total.		Cost of Operating per Car Mile.	Number.	Remarks.
$	cts.	$	cts.			
....		4,814	75	....	1	Not in operation now; return very imperfect; road passed into hands of creditors, Sept., 1901, and closed down.
9,761	32	11,137	60	15·09	2	
12,005	51	26,964	97	13·48	3	
163,897	06	202,600	07	14·34	4	This report, from March 31, 1900, for year ended March 31, 1901.
16,524	66	23,443	77	15·40	5	
8,147	36	17,062	77	20·68	6	
6,546	12	13,366	33	6·83	7	
110,565	89	110,565	89	18·06	8	Imperfect return.
4,958	49	13,449	67	18·97	9	
10,813	00	20,951	30	9·03	10	
6,421	91	22,230	48	11·53	11	
56,760	86	86,473	76	7·26	12	
25,633	82	39,092	89	10·47	13	
26,042	24	29,630	76	30·86	14	
20,952	17	59,096	65	*	15	* No mileage given.
3,499	62	33,217	80	13·29	16	
32,896	17	75,582	34	11·46	17	
563,194	01	1,072,642	53	10·22	18	† Including electric plant at power station.
11,933	93	22,069	30	9·53	19	
12,129	96	25,507	33	30·01	20	
23,319	34	45,586	20	16·44	21	
5,350	12	7,119	45	*	22	* No mileage given.
18,877	28	42,169	60	20·52	23	
9,391	57	20,337	01	39·17	24	
119,703	65	192,206	08	8·53	25	‡ Including general equipment.
1,037	07	10,839	86	15·27	26	
855	93	1,312	30	*	27	From May 9, 1901, to June 30, 1901. *No mileage given.
20,787	58	117,904	02	10·82	28	
51,800	00	51,800	00	11·62	29	
13,275	39	14,413	56	*	30	* No mileage given.
19,144	64	31,899	88	*	31	* No mileage given.
11,408	58	13,206	37	15·98	32	
3,000	00	17,300	00	*	33	* No mileage given.
12,092	31	12,092	31	7·30	34	Imperfect return.
6,705	30	6,705	30	6·76	35	
822,836	09	822,836	09	8·86	36	
2,214	13	13,546	32	17·81	37	
51,184	70	93,377	36	9·16	38	
1,805	62	1,865	20	9·57	39	
1,995	00	8,745	00	*	40	* No mileage given.
2,299,468	40	3,435,162	87			

No. 8.—Summary of Accidents for

Number.	Name of Electric Railway.	Mileage	Passengers, Employés or Others.	Fell from Cars or Engines.		Jumping on or off Trains or Engines when in motion.		At work on or near Track making up Trains.		Putting arms or heads out of Windows.	
				Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1	Brantford Street	5·90	Passengers	....	....	....	1	....	....	....	....
			Others	....	....	....	....	....	....	....	....
2	British Columbia	48·30	Others	....	....	....	....	....	....	....	....
3	Halifax Electric Tramway Co	8·43	Passengers	....	....	....	7	....	....	....	....
4	Hamilton and Dundas	7·25	Passengers	....	....	....	....	....	....	....	....
5	Hamilton Radial	12·00	Passengers	....	3	....	....	....	....	....	....
6	Hamilton Street	22·00	Passengers	....	22	....	3	....	....	....	1
7	Kingston, Portsmouth and Cataraqui	7·40	Others	....	....	....	....	....	....	....	....
8	Metropolitan	28·00	Others	....	....	....	....	....	....	....	....
9	Montreal Terminal	14·10	Others	....	....	....	....	....	....	....	....
10	Niagara, St. Catharines and Toronto	19·94	Others	....	....	....	....	....	....	....	....
11	Port Arthur	7·60	Others	....	....	....	....	....	....	....	....
12	Quebec City Street	17·22	Employees	....	....	....	....	....	....	....	....
			Others	....	....	....	....	....	....	....	....
13	Toronto Railway Co	89·10	Passengers	....	1	....	60	....	....	....	....
			Employees	....	2	....	4	1	9	....	....
			Others	....	....	....	....	....	....	....	....
14	Toronto Suburban	7·50	Passengers	....	....	....	....	....	....	....	....
15	Woodstock, Thames Valley and Ingersoll	9·50	Others	....	....	....	....	....	....	....	....
				....	28	....	75	1	9	....	1

Note.—This statement shows the Electric Railways on which accidents have occurred the Year ended June 30, 1901.

Coupling Cars.		Collisions or by Trains thrown from Track.		Walking, standing, lying or being on Track.		Explosions.		Striking Bridges.		Other Causes		Totals.		
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
											1		2	1
				1								1		
					1								1	2
					3								10	3
					2								2	4
					4								7	5
				2	21							2	47	6
					1								1	7
				1	5							1	5	8
										1		1		9
				1								1		10
				1								1		11
	1												1	12
					1								1	
			17		2		8				7		90	13
	14		2		1		2				23	1	57	
			41	5	36		1				12	5	90	
										1		1		14
										1		1		15
	15		60	11	77		6			3	43	15	314	

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